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Acurex Corp, Mountain View, Calif Energy and Environmental Div

Prepared for

Industrial Environmental Research Lab, Research Triangle Park, N C

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16. ABSTRACT The report gives results of an inventory of gaseous, liquid, and solid effluents from stationary NOx sources, projected to the year 2000, and ranks them according to their potential for environmental hazard. It classifies sources according to their pollution formation characteristics, and gives results of a compilation of emission factors and regional and national fuel consumption data for specific equipment/fuel types. It gives results of an emission inventory for NOx, SOx, CO, HC, particulates, sulfates, POM, and liquid or solid effluents. It projects emissions to 1985 and to 2000 for five energy scenarios, depicting alternative uses of coal, nuclear power, and synthetic fuels. It ranks sources by nationwide emissions loading for 1974, 1985, and 2000. It describes a source analysis model used to estimate pollution hazard, considering ambient dispersion, population exposure, background concentrations, and health-based impact threshold limits. It applies the model the model to the emission inventory to produce source rankings based on both single-pollutant and total-multimedia impact factors.

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Nitrogen Oxides	Gas Turbines	Stationary Sources	07B	13G
Organic Compounds	Internal Combustion	Environmental Assessment	07C	
Inorganic Compounds	Engines			21G
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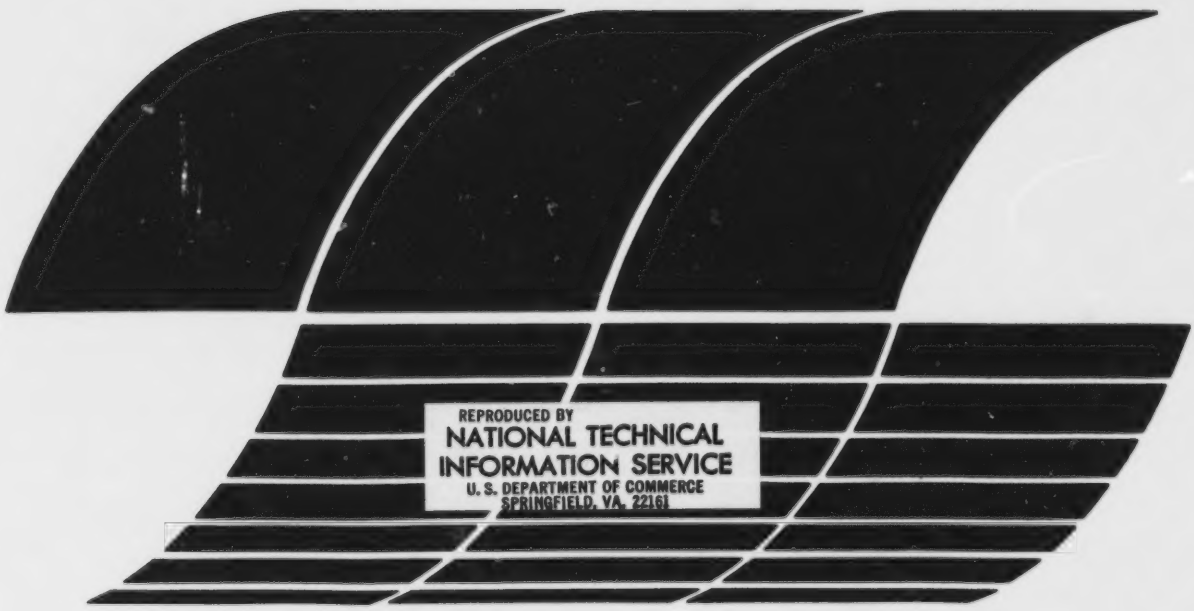

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Emission Characterization of Stationary NO_x Sources: Volume II: Data Supplement

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PREFACE

This is the third of 10 special reports in the "Environmental Assessment of Stationary Source NO_x Combustion Modification Technologies" (NO_x E/A). The NO_x E/A is a 36-month program which began in July 1976. The program has two main objectives: (1) to identify the multimedia environmental impact of stationary combustion sources and NO_x combustion modification controls; and (2) to identify the most cost-effective, environmentally sound NO_x combustion modification controls for attaining and maintaining current and projected NO_2 air quality standards to the year 2000.

The program structure incorporating these objectives is shown in Figure P-1. The rectangular symbols denote specific subtasks while the oval symbols show program output. The arrows show the sequence of subtasks and the major interaction among tasks. The top half of the figure shows the effort to set preliminary source/control priorities. These efforts are documented in the "Preliminary Environmental Assessment of Combustion Modification Techniques," September 1977, under EPA Contract 68-02-2160. The bottom half of the figure shows the major program efforts which are currently under investigation.

The two major program tasks are: Environmental Assessment and Process Engineering, and Systems Analysis. In the first task, the environmental, economic, and operational impacts of specific

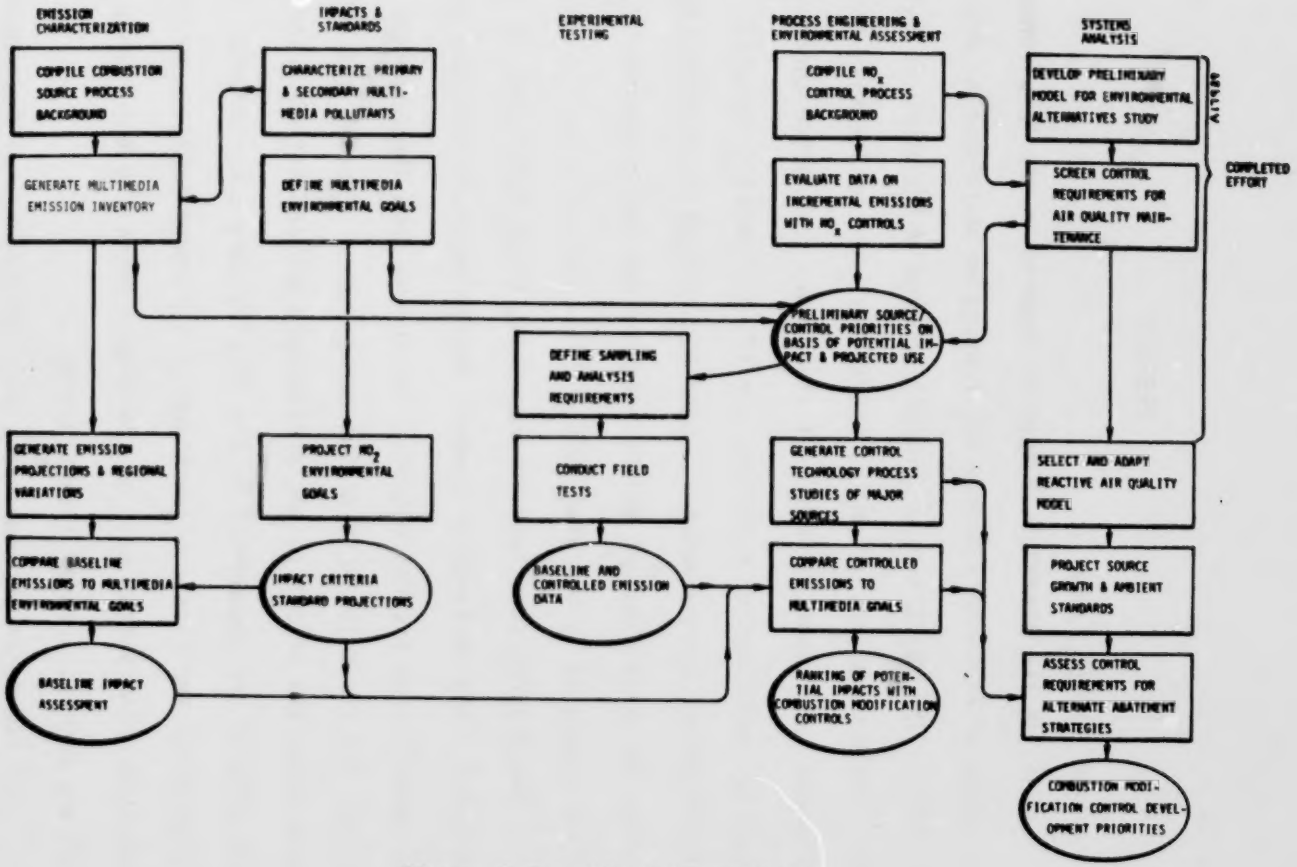

Figure P-1. NO_x E/A approach.

source/control combinations will be assessed. On the basis of this assessment, the incremental multimedia impacts from the use of combustion modification NO_x controls will be identified and ranked. The second task will, in turn, use these results to identify and rank the most effective source/control combinations to comply, on a local basis, with the current NO_2 air quality standards and projected NO_2-related standards. As shown in Figure P-1, the key tasks supporting these efforts are the Baseline Emissions Characterization, Evaluation of Emission Impacts and Standards, and Experimental Testing.

The emissions characterization effort documented in Volume I of this report provides supporting data to subsequent NO_x E/A efforts. Figure P-2 shows the approach of the emissions characterization task, and the organization of this report. The preliminary emissions factor development, characterization of NO_x equipment sources, and determination of fuel consumption which resulted in the 1974 controlled national emissions inventory is documented in the "Preliminary Environmental Assessment of Combustion Modification Techniques" (Reference P-1). However, the following efforts are documented in Volume I of this report. Section 2 describes the characterization of NO_x sources. This characterization was used to develop environmental rankings and will be used for process engineering efforts and systems analyses in future tasks. Section 2 includes a chart summary of sources and effluent streams that are of potential concern as NO_x sources.

Section 3 summarizes data on fuels composition and usage. Both regional and national fuel usage are needed to generate comprehensive national and regional emission inventories for 1974. National fuel consumption was projected through the year 2000, considering several

Figure P-2. Emissions characterization approach.

possible future conditions such as conservation, use of nuclear power and coal conversion. These scenarios are required to generate the future emissions inventories in Section 4 and to conduct the source analysis modeling in Section 5.

In Section 4, multimedia effluents are quantified for the combinations of equipment types, fuels, and effluent streams identified in Sections 2 and 3. A national emission inventory is given for 1974. Regional inventories are presented for 1974. Additionally, current and projected NO_x control implementation is estimated to arrive at controlled NO_x inventories for 1974, 1985, and 2000.

The energy projections, equipment distribution trends, and future environmental regulations from Section 4 are integrated in Section 5 with urban/rural equipment distributions and source populations proximities to provide inputs to the Source Analysis Model (SAM). The results of SAM are used to rank sources according to their multimedia environmental impact. These results highlight R&D needed to further quantify impact potential, or to control adverse emission levels for specific source/pollutant combinations. It should be noted here that the results of this study are meant as qualitative indicators of potential problems rather than rigid conclusions.

Volume II contains the appendices to this report. They are presented as follows:

- Appendix A: Regional Fuel Consumption Tables for 1974
- Appendix B: National Fuel Consumption Tables for 1985 and 2000
- Appendix C: National Criteria Pollutant Emissions for 1974
- Appendix D: National Emissions Inventory for 1974
- Appendix E: Regional Stationary Source Combustion Controls

- Appendix F: National Source Pollution Potential Assessment for 1974
- Appendix G: Pollution Potential Summaries for the Energy Projection Scenarios in 1985 and 2000
- Appendix H: Pollution Potential Trends to the Year 2000 for the Energy Projection Scenarios

These appendices support the report documentation given in Volume I.

REFERENCES FOR THE PREFACE

P-1. Mason, H. B., et al., "Preliminary Environmental Assessment of Combustion Modification Techniques, Volume II, Technical Results," EPA-600/7-77-119b, NTIS-PB 276 681/AS, Acurex Corporation, October 1977.

APPENDIX A

REGIONAL FUEL CONSUMPTION TABLES FOR 1974

Appendix A presents regional fuel consumption for 1974. Regional tabular summaries are presented as follows:

- Utility boiler fuel consumption - Tables A-1 to A-9
- Packaged boiler fuel consumption - Tables A-10 to A-18
- Warm air furnace and other commercial/residential combustion - Tables A-19 to A-22
- Gas turbine fuel consumption - Tables A-23 to A-26
- Reciprocating IC engine fuel consumption - Tables A-27 to A-35
- Industrial process heating fuel consumption - Tables A-36 to A-44

For further analysis, Section 3.3 gives a detailed description of the sources and reliability of these estimates. These values are used in Section 4 to determine regional emissions. It should be noted that these totals do not reflect total energy consumed by stationary sources since electrical inputs from nonfossil-fuel sources are excluded. Figure 1 shows the divisions by state that were used in this section.

Figure 1. Divisions of the United States.

TABLE A-1. UTILITY BOILER FUEL CONSUMPTION (EJ)

NEW ENGLAND

Utility Boilers	Medium Sulfur Bituminous and Subbituminous	High Sulfur Bituminous and Subbituminous	Low Sulfur Bituminous and Subbituminous	Lignite	Anthracite	Total Coal	High Sulfur Residual and Crude	Medium Sulfur Residual and Crude	Low Sulfur Residual and Crude	Total Residual and Crude	Distillate	Total Oil	Natural Gas	Total All Fuels
Tangential	0.0139	0.0084	0.0046	0.0003	----	0.0272	0.0288	0.0724	0.0936	0.1948	0.0053	0.2001	0.0032	0.2305
Single Wall-Fired	0.0080	0.0048	0.0027	0.0001	----	0.0156	0.0288	0.0726	0.0938	0.1952	0.0249	0.2201	0.0069	0.2426
Opposed Wall and Turbo Furnace	0.0022	0.0014	0.0007	0.0001	----	0.0044	0.0116	0.0293	0.0380	0.0789	0.0022	0.0811	0.0074	0.0929
Cyclone	0.0008	0.0014	----	0.0079	----	0.0101	0.0018	0.0041	0.0054	0.0113	----	0.0113	0.0002	0.0216
Vertical and Stoker	0.0006	0.0006	----	0.0001	0.0006	0.0019	----	----	----	----	----	----	----	0.0019

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TABLE A-2. UTILITY BOILER FUEL CONSUMPTION (EJ)

MIDDLE ATLANTIC

Utility Boilers	Medium Sulfur Bituminous and Subbituminous	High Sulfur Bituminous and Subbituminous	Low Sulfur Bituminous and Subbituminous	Lignite	Anthracite	Total Coal	High Sulfur Residual and Crude	Medium Sulfur Residual and Crude	Low Sulfur Residual and Crude	Total Residual and Crude	Distillate	Total Oil	Natural Gas	Total All Fuels
Tangential	0.3022	0.1812	0.0994	0.0061	----	0.5889	0.0524	0.1317	0.1702	0.3543	0.0096	0.3639	0.0147	0.9675
Single Wall-Fired	0.1731	0.1046	0.0573	0.0013	----	0.3363	0.0524	0.1319	0.1705	0.3548	0.0452	0.4000	0.0319	0.7682
Opposed Wall and Turbo Furnace	0.0484	0.0292	0.0160	0.0024	----	0.0960	0.0211	0.0532	0.0690	0.1433	0.0040	0.1473	0.0164	0.2597
Cyclone	0.0181	0.1478	----	0.0157	----	0.1816	0.0032	0.0075	0.0099	0.0206	----	0.0206	0.0008	0.2030
Vertical and Stoker	0.0126	0.0126	----	0.0010	0.0125	0.0387	----	----	----	----	----	----	----	0.0387

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TABLE A-3. UTILITY BOILER FUEL CONSUMPTION (EJ)

EAST-NORTH-CENTRAL

Utility Boilers	Medium Sulfur Bituminous and Subbituminous	High Sulfur Bituminous and Subbituminous	Low Sulfur Bituminous and Subbituminous	Lignite	Anthracite	Total Coal	High Sulfur Residual and Crude	Medium Sulfur Residual and Crude	Low Sulfur Residual and Crude	Total Residual and Crude	Distillate	Total Oil	Natural Gas	Total All Fuels
Tangential	0.8898	0.5371	0.2947	0.0180	----	1.7396	0.0098	0.0245	0.0317	0.0660	0.0018	0.0678	0.0399	1.8473
Single Wall-Fired	0.5131	0.3099	0.1699	0.0037	----	0.9966	0.0098	0.0245	0.0317	0.0660	0.0084	0.0744	0.0863	1.1573
Opposed Wall and Turbo Furnace	0.1434	0.0865	0.0475	0.0071	----	0.2845	0.0039	0.0099	0.0128	0.0266	0.0008	0.0274	0.0443	0.3562
Cyclone	0.0536	0.4381	----	0.0465	----	0.5382	0.0006	0.0014	0.0018	0.0038	----	0.0038	0.0022	0.5442
Vertical and Stoker	0.0373	0.0373	----	0.0030	0.0370	0.1146	----	----	----	----	----	----	----	0.1146

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TABLE A-4. UTILITY BOILER FUEL CONSUMPTION (EJ)

WEST-NORTH-CENTRAL

Utility Boilers	Medium Sulfur Bituminous and Subbituminous	High Sulfur Bituminous and Subbituminous	Low Sulfur Bituminous and Subbituminous	Lignite	Anthracite	Total Coal	High Sulfur Residual and Crude	Medium Sulfur Residual and Crude	Low Sulfur Residual and Crude	Total Residual and Crude	Distillate	Total Oil	Natural Gas	Total All Fuels
Tangential	0.2474	0.1494	0.0820	0.0050	--	0.4838	0.0013	0.0032	0.0041	0.0086	0.0002	0.0088	0.1163	0.6089
Single Wall-Fired	0.1427	0.0862	0.0472	0.0010	--	0.2771	0.0013	0.0032	0.0041	0.0086	0.0011	0.0097	0.2517	0.5385
Opposed Wall and Turbo Furnace	0.0399	0.0240	0.0132	0.0020	--	0.0791	0.0005	0.0013	0.0017	0.0035	0.0001	0.0036	0.1291	0.2118
Cyclone	0.0149	0.1218	--	0.0129	--	0.1496	0.0001	0.0002	0.0002	0.0005	--	0.0005	0.0063	0.1564
Vertical and Stoker	0.0104	0.0104	--	0.0008	0.0103	0.0319	--	--	--	--	--	--	--	0.0319

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TABLE A-5. UTILITY BOILER FUEL CONSUMPTION (EJ)

SOUTH ATLANTIC

Utility Boilers	Medium Sulfur Bituminous and Subbituminous	High Sulfur Bituminous and Subbituminous	Low Sulfur Bituminous and Subbituminous	Lignite	Anthracite	Total Coal	High Sulfur Residual and Crude	Medium Sulfur Residual and Crude	Low Sulfur Residual and Crude	Total Residual and Crude	Distillate	Total Oil	Natural Gas	Total All Fuels
Tangential	0.5243	0.3165	0.1736	0.1060	--	1.1204	0.0576	0.1446	0.1870	0.3892	0.0106	0.3998	0.0727	1.5929
Single Wall-Fired	0.3023	0.1826	0.1001	0.0022	--	0.5872	0.0576	0.1449	0.1873	0.3898	0.0497	0.4395	0.1572	1.1839
Opposed Wall and Turbo Furnace	0.0845	0.0510	0.0280	0.0042	--	0.1677	0.0232	0.0585	0.0758	0.1575	0.0044	0.1619	0.0806	0.4102
Cyclone	0.0316	0.2581	--	0.0274	--	0.3171	0.0035	0.0082	0.0109	0.0226	--	0.0226	0.0039	0.3436
Vertical and Stoker	0.0219	0.0219	--	0.0018	0.0218	0.0674	--	--	--	--	--	--	--	0.0674

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TABLE A-6. UTILITY BOILER FUEL CONSUMPTION (EJ)

EAST-SOUTH-CENTRAL

Utility Boilers	Medium Sulfur Bituminous and Subbituminous	High Sulfur Bituminous and Subbituminous	Low Sulfur Bituminous and Subbituminous	Lignite	Anthracite	Total Coal	High Sulfur Residual and Crude	Medium Sulfur Residual and Crude	Low Sulfur Residual and Crude	Total Residual and Crude	Distillate	Total Oil	Natural Gas	Total All Fuels
Tangential	0.4104	0.2477	0.1359	0.0083	--	0.8023	0.0036	0.0089	0.0115	0.0240	0.0006	0.0246	0.0167	0.8436
Single Wall-Fired	0.2366	0.1430	0.0784	0.0017	--	0.4597	0.0036	0.0089	0.0115	0.0240	0.0031	0.0271	0.0361	0.5229
Opposed Wall and Turbo Furnace	0.0662	0.0399	0.0219	0.0033	--	0.1313	0.0014	0.0036	0.0047	0.0097	0.0003	0.0100	0.0185	0.1598
Cyclone	0.0247	0.2021	--	0.0214	--	0.2482	0.0002	0.0005	0.0007	0.0014	--	0.0014	0.0009	0.2505
Vertical and Stoker	0.0172	0.0172	--	0.0014	0.0170	0.0528	--	--	--	--	--	--	--	0.0528

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TABLE A-7. UTILITY BOILER FUEL CONSUMPTION (EJ)

WEST-SOUTH-CENTRAL

Utility Boilers	Medium Sulfur Bituminous and Subbituminous	High Sulfur Bituminous and Subbituminous	Low Sulfur Bituminous and Subbituminous	Lignite	Anthracite	Total Coal	High Sulfur Residual and Crude	Medium Sulfur Residual and Crude	Low Sulfur Residual and Crude	Total Residual and Crude	Distillate	Total Oil	Natural Gas	Total All Fuels
Tangential	0.0346	0.0209	0.0115	0.0007	--	0.0677	0.0084	0.0212	0.0274	0.0570	0.0016	0.0586	0.7012	0.8275
Single Wall-Fired	0.0200	0.0121	0.0066	0.0001	--	0.0388	0.0084	0.0213	0.0275	0.0572	0.0073	0.0645	1.5170	1.6203
Opposed Wall and Turbo Furnace	0.0056	0.0034	0.0019	0.0003	--	0.0112	0.0034	0.0086	0.0111	0.0231	0.0007	0.0238	0.7778	0.8128
Cyclone	0.0021	0.0171	--	0.0018	--	0.0210	0.0005	0.0012	0.0016	0.0033	--	0.0033	0.0377	0.0620
Vertical and Stoker	0.0014	0.0014	--	0.0001	0.0014	0.0043	--	--	--	--	--	--	--	0.0043

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TABLE A-8. UTILITY BOILER FUEL CONSUMPTION (EJ)

MOUNTAIN

Utility Boilers	Medium Sulfur Bituminous and Subbituminous	High Sulfur Bituminous and Subbituminous	Low Sulfur Bituminous and Subbituminous	Lignite	Anthracite	Total Coal	High Sulfur Residual and Crude	Medium Sulfur Residual and Crude	Low Sulfur Residual and Crude	Total Residual and Crude	Distillate	Total Oil	Natural Gas	Total All Fuels
Tangential	0.1821	0.1099	0.0603	0.0037	--	0.3560	0.0042	0.0105	0.0136	0.0283	0.0008	0.0291	0.0675	0.4526
Single Wall-Fired	0.1050	0.0634	0.0348	0.0008	--	0.2040	0.0042	0.0105	0.0136	0.0283	0.0036	0.0319	0.1460	0.3819
Opposed Wall and Turbo Furnace	0.0294	0.0177	0.0097	0.0015	--	0.0583	0.0017	0.0042	0.0055	0.0114	0.0003	0.0117	0.0749	0.1449
Cyclone	0.0110	0.0897	--	0.0095	--	0.1102	0.0003	0.0006	0.0008	0.0017	--	0.0017	0.0036	0.1155
Vertical and Stoker	0.0076	0.0076	--	0.0006	0.0076	0.0234	--	--	--	--	--	--	--	0.0234

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TABLE A-9. UTILITY BOILER FUEL CONSUMPTION (EJ)

PACIFIC

Utility Boilers	Medium Sulfur Bituminous and Subbituminous	High Sulfur Bituminous and Subbituminous	Low Sulfur Bituminous and Subbituminous	Lignite	Anthracite	Total Coal	High Sulfur Residual and Crude	Medium Sulfur Residual and Crude	Low Sulfur Residual and Crude	Total Residual and Crude	Distillate	Total Oil	Natural Gas	Total All Fuels
Tangential	0.0213	0.0128	0.0070	0.0004	--	0.0415	0.0299	0.0750	0.0969	0.2018	0.0055	0.2073	0.1018	0.3506
Single Wall-Fired	0.0123	0.0074	0.0041	0.0001	--	0.0239	0.0299	0.0751	0.0971	0.2021	0.0258	0.2279	0.2203	0.4721
Opposed Wall and Turbo Furnace	0.0034	0.0021	0.0011	0.0002	--	0.0068	0.0120	0.0303	0.0393	0.0816	0.0023	0.0839	0.1130	0.2037
Cyclone	0.0013	0.0105	--	0.0011	--	0.0129	0.0018	0.0043	0.0056	0.0117	--	0.0117	0.0055	0.0301
Vertical and Stoker	0.0009	0.0009	--	0.0001	0.0009	0.0028	--	--	--	--	--	--	--	0.0028

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TABLE A-10. PACKAGED BOILER FUEL CONSUMPTION (EJ)

NEW ENGLAND

Packaged Boilers	Anthracite	Bituminous or Lignite	Total Coal	Residual Oil	Distillate Oil	Total Oil	Natural Gas	Process Gas	Total Fuel
Watertube Boiler Wall-Firing >29 MW	---	0.0046	0.0046	0.0911	0.0009	0.0920	0.0260	---	0.1226
Watertube Boiler Stoker >29 MW	---	0.0042	0.0042	---	---	---	---	---	0.0042
Single Burner Watertube <29 MW	---	0.0029	0.0029	0.0851	0.0011	0.0862	0.0473	---	0.1364
Single Burner Scotch Firetube <29 MW	---	---	---	0.1519	0.0048	0.1567	0.0025	0.0001	0.1593
Single Burner HRT Firetube <29 MW	---	---	---	0.0595	0.0028	0.0623	0.0014	---	0.0637
Single Burner Firebox Firetube	---	---	---	0.0979	0.0043	0.1022	0.0023	0.0001	0.1046
Single Burner Cast Iron Boilers	---	---	---	0.0378	0.0351	0.0729	0.0512	---	0.1241
Stoker Watertubes <29 MW	---	0.0138	0.0138	---	---	---	---	---	0.0138
Stoker Firetubes <29 MW	0.0001	0.0001	0.0002	---	---	---	---	---	0.0002
Steam or Hot Water Units (Residential Only)	0.0003	0.0001	0.0004	---	0.1743	0.1743	0.0197	---	0.1944

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TABLE A-11. PACKAGED BOILER FUEL CONSUMPTION (EJ)

MIDDLE ATLANTIC

Packaged Boilers	Anthracite	Bituminous or Lignite	Total Coal	Residual Oil	Distillate Oil	Total Oil	Natural Gas	Process Gas	Total Fuel
Watertube Boiler Wall-Firing >29 MW	---	0.0581	0.0581	0.1847	0.0134	0.1981	0.0817	---	0.3379
Watertube Boiler Stoker >29 MW	---	0.0531	0.0531	---	---	---	---	---	0.0531
Single Burner Watertube <29 MW	---	0.0361	0.0361	0.1726	0.0162	0.1888	0.1487	---	0.3736
Single Burner Scotch Firetube <29 MW	---	---	---	0.1606	0.0350	0.1956	0.0313	0.0011	0.2280
Single Burner HRT Firetube <29 MW	---	---	---	0.0629	0.0206	0.0835	0.0172	---	0.1007
Single Burner Firebox Firetube	---	---	---	0.1035	0.0316	0.1351	0.0290	0.0011	0.1652
Single Burner Cast Iron Boilers	---	---	---	0.0849	0.0788	0.1637	0.1149	---	0.2786
Stoker Watertubes <29 MW	---	0.1748	0.1748	---	---	---	---	---	0.1748
Stoker Firetubes <29 MW	0.0321	0.0701	0.1022	---	---	---	---	---	0.1022
Steam or Hot Water Units (Residential Only)	0.0123	0.0008	0.0131	0.0649	0.2871	0.3520	0.1104	---	0.7748

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TABLE A-12. PACKAGED BOILER FUEL CONSUMPTION (EJ)

EAST-NORTH-CENTRAL

Packaged Boilers	Anthracite	Bituminous or Lignite	Total Coal	Residual Oil	Distillate Oil	Total Oil	Natural Gas	Process Gas	Total Fuel
Watertube Boiler Wall-Firing >29 MW	---	0.2060	0.2060	0.7130	0.0239	0.7369	0.2329	---	1.1758
Watertube Boiler Stoker >29 MW	---	0.1883	0.1883	---	---	---	---	---	0.1883
Single Burner Watertube <29 MW	---	0.1281	0.1281	0.0666	0.0289	0.0955	0.4242	---	0.6478
Single Burner Scotch Firetube <29 MW	---	---	---	0.1558	0.1570	0.3128	0.1528	0.0126	0.4782
Single Burner HRT Firetube <29 MW	---	---	---	0.0610	0.0926	0.1536	0.0841	---	0.2377
Single Burner Firebox Firetube	---	---	---	0.1004	0.1419	0.2423	0.1413	0.0126	0.3962
Single Burner	---	---	---	0.0128	0.0119	0.0247	0.0174	---	0.0421
Stoker Watertubes <29 MW	0.0053	0.6193	0.6246	---	---		---	---	0.6246
Stoker Firetubes <29 MW	0.0008	0.2968	0.2976	---	---		---	---	0.2976
Steam or Hot Water Units (Residential Only)	0.0010	0.0043	0.0053	0.0022	0.1682	0.1704	0.2247	---	0.4004

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TABLE A-13. PACKAGED BOILER FUEL CONSUMPTION (EJ)

WEST-NORTH-CENTRAL

Packaged Boilers	Anthracite	Bituminous or Lignite	Total Coal	Residual Oil	Distillate Oil	Total Oil	Natural Gas	Process Gas	Total Fuel
Watertube Boiler Wall-Firing >29 MW	---	0.0510	0.0510	0.0204	0.0088	0.0292	0.0854	---	0.1656
Watertube Boiler Stoker >29 MW	---	0.0466	0.0466	---	---	---	---	---	0.0466
Single Burner Watertube <29 MW	---	0.0317	0.0317	0.0190	0.0107	0.0297	0.1555	---	0.2169
Single Burner Scotch Firetube <29 MW	---	---	---	0.0227	0.0301	0.0528	0.0949	0.0002	0.1479
Single Burner HRT Firetube <29 MW	---	---	---	0.0089	0.0177	0.0266	0.0522	---	0.0788
Single Burner Firebox Firetube	---	---	---	0.0146	0.0272	0.0418	0.0877	0.0002	0.1297
Single Burner Cast Iron Boilers	---	---	---	0.0320	0.0297	0.0617	0.0433	---	0.1050
Stoker Watertubes <29 MW	0.0053	0.1533	0.1586	---	---		---	---	0.1586
Stoker Firetubes <29 MW	0.0001	0.0310	0.0311	---	---		---	---	0.0311
Steam or Hot Water Units (Residential Only)	---	0.0012	0.0012	---	0.0718	0.0718	0.0851	---	0.1581

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TABLE A-14. PACAKGED BOILER FUEL CONSUMPTION (EJ)

SOUTH ATLANTIC

Packaged Boilers	Anthracite	Bituminous or Lignite	Total Coal	Residual Oil	Distillate Oil	Total Oil	Natural Gas	Process Gas	Total Fuel
Watertube Boiler Wall-Firing >29 MW	---	0.0643	0.0643	0.2000	0.0197	0.2197	0.1476	---	0.4316
Watertube Boiler Stoker >29 MW	---	0.0587	0.0587	---	---	---	---	---	0.0587
Single Burner Watertube <29 MW	---	0.0399	0.0399	0.1868	0.0239	0.2107	0.2687	---	0.5193
Single Burner Scotch Firetube <29 MW	---	---	---	0.2641	0.0777	0.3418	0.0625	0.0001	0.4044
Single Burner HRT Firetube <29 MW	---	---	---	0.1034	0.0458	0.1492	0.0344	---	0.1836
Single Burner Firebox Firetube	---	---	---	0.1702	0.0702	0.2404	0.0578	0.0001	0.2983
Single Burner Cast Iron Boilers	---	---	---	0.0013	0.0012	0.0025	0.0017	---	0.0042
Stoker Watertubes <29 MW	---	0.1932	0.1932	---	---	---	---	---	0.1932
Stoker Firetubes <29 MW	0.0001	0.0766	0.0767	---	---	---	---	---	0.0767
Steam or Hot Water Units (Residential Only)	0.0004	0.0024	0.0028	---	0.1168	0.1168	0.0531	---	0.1727

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TABLE A-15. PACKAGED BOILER FUEL CONSUMPTION (EJ)

EAST-SOUTH-CENTRAL

Packaged Boilers	Anthracite	Bituminous or Lignite	Total Coal	Residual Oil	Distillate Oil	Total Oil	Natural Gas	Process Gas	Total Fuel
Watertube Boiler Wall-Firing >29 MW	---	0.0592	0.0592	0.0064	0.0063	0.0127	0.0845	---	0.1564
Watertube Boiler Stoker >29 MW	---	0.0541	0.0541	---	---	---	---	---	0.0541
Single Burner Watertube <29 MW	---	0.0368	0.0368	0.0060	0.0076	0.0136	0.1538	---	0.2042
Single Burner Scotch Firetube <29 MW	---	---	---	0.0127	0.0359	0.0486	0.0502	0.0031	0.1019
Single Burner HRT Firetube <29 MW	---	---	---	0.0050	0.0212	0.0262	0.0276	---	0.0538
Single Burner Firebox Firetube	---	---	---	0.0082	0.0325	0.0407	0.0464	0.0031	0.0902
Single Burner Cast Iron Boilers	---	---	---	0.0178	0.0165	0.0343	0.0241	---	0.0584
Stoker Watertubes <29 MW	---	0.1778	0.1778	---	---	---	---	---	0.1778
Stoker Firetubes <29 MW	0.0089	0.0687	0.0776	---	---	---	---	---	0.0776
Steam or Hot Water Units (Residential Only)	---	0.0016	0.0016	---	0.0093	0.0093	0.0375	---	0.0484

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TABLE A-16. PACKAGED BOILER FUEL CONSUMPTION (EJ)

WEST-SOUTH-CENTRAL

Packaged Boilers	Anthracite	Bituminous or Lignite	Total Coal	Residual Oil	Distillate Oil	Total Oil	Natural Gas	Process Gas	Total Fuel
Watertube Boiler Wall-Firing >29 MW	---	0.0173	0.0173	0.0198	0.0062	0.0260	0.1355	---	0.1788
Watertube Boiler Stoker >29 MW	---	0.0158	0.0158	---	---	---	---	---	0.0158
Single Burner Watertube <29 MW	---	0.0108	0.0108	0.0185	0.0075	0.0260	0.2467	---	0.2835
Single Burner Scotch Firetube <29 MW	---	---	---	0.0373	0.0354	0.0727	0.4022	0.0008	0.4757
Single Burner HRT Firetube <29 MW	---	---	---	0.0146	0.0209	0.0355	0.2214	---	0.2569
Single Burner Firebox Firetube	---	---	---	0.0243	0.0320	0.0563	0.3720	0.0008	0.4291
Single Burner Cast Iron Boilers	---	---	---	0.0005	0.0005	0.0010	0.0007	---	0.0017
Stoker Watertubes <29 MW	0.0105	0.0521	0.0626	---	---	---	---	---	0.0626
Stoker Firetubes <29 MW	---	---	---	---	---	---	---	---	---
Steam or Hot Water Units (Residential Only)	---	---	---	---	0.0009	0.0009	0.0716	---	0.0725

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TABLE A-17. PACKAGED BOILER FUEL CONSUMPTION (EJ)

MOUNTAIN

Packaged Boilers	Anthracite	Bituminous or Lignite	Total Coal	Residual Oil	Distillate Oil	Total Oil	Natural Gas	Process Gas	Total Fuel
Watertube Boiler Wall-Firing >29 MW	---	0.0398	0.0398	0.0064	0.0015	0.0079	0.0381	---	0.0858
Watertube Boiler Stoker >29 MW	---	0.0364	0.0364	---	---		---	---	0.0364
Single Burner Watertube <29 MW	---	0.0247	0.0247	0.0060	0.0018	0.0078	0.0693	---	0.1018
Single Burner Scotch Firetube <29 MW	---	---	---	0.0134	0.0100	0.0234	0.0377	0.0008	0.0619
Single Burner HRT Firetube >29 MW	---	---	---	0.0053	0.0059	0.0112	0.0207	---	0.0319
Single Burner Firebox Firetube	---	---	---	0.0087	0.0091	0.0178	0.0348	0.0008	0.0534
Single Burner Cast Iron Boilers	---	---	---	0.0057	0.0053	0.0110	0.0078	---	0.0188
Stoker Watertubes <29 MW	---	0.1196	0.1196	---	---		---	---	0.1196
Stoker Firetubes <29 MW	---	0.0063	0.0063	---	---		---	---	0.0063
Steam or Hot Water Units (Residential Only)	---	0.0006	0.0006	0.0001	0.0115	0.0116	0.0391	---	0.0513

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TABLE A-18. PACKAGED BOILER FUEL CONSUMPTION (EJ)

PACIFIC

Packaged Boilers	Anthracite	Bituminous or Lignite	Total Coal	Residual Oil	Distillate Oil	Total Oil	Natural Gas	Process Gas	Total Fuel
Watertube Boiler Wall-Firing >29 MW	---	0.0097	0.0097	0.0370	0.0043	0.0413	0.0965	---	0.1475
Watertube Boiler Stoker >29 MW	---	0.0089	0.0089	---	---	---	---	---	0.0089
Single Burner Watertube <29 MW	---	0.0060	0.0060	0.0345	0.0053	0.0398	0.1758	---	0.2216
Single Burner Scotch Firetube <29 MW	---	---	---	0.1264	0.0601	0.1865	0.1380	0.0004	0.3249
Single Burner HRT Firetube <29 MW	---	---	---	0.0495	0.0354	0.0849	0.0760	---	0.1609
Single Burner Firebox Firetube	---	---	---	0.0815	0.0543	0.1358	0.1277	0.0004	0.2639
Single Burner Cast Iron Boilers	---	---	---	0.0023	0.0021	0.0044	0.0031	---	0.0075
Stoker Watertubes <29 MW	---	0.0291	0.0291	---	---	---	---	---	0.0291
Stoker Firetubes <29 MW	0.0001	0.0056	0.0057	---	---	---	---	---	0.0057
Steam or Hot Water Units (Residential Only)	---	0.0001	0.0001	0.0019	0.0400	0.0419	0.0958	---	0.1378

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TABLE A-19. WARM AIR FURNACE AND OTHER COMMERCIAL/ RESIDENTIAL COMBUSTION (EJ)

NEW ENGLAND

Warm Air Furnaces	Distillate Oil	Natural Gas[a]	Total Fuel
Warm Air Central Furnaces	0.2783	0.0825	0.3608
Warm Air Room Heaters	0.1440	0.0387	0.1827
Miscellaneous Commercial/ Residential Combustion	--	0.0267	0.0267

[a]Includes bottled, tank, or LPG

MIDDLE ATLANTIC

Warm Air Furnaces	Distillate Oil	Natural Gas[a]	Total Fuel
Warm Air Central Furnaces	0.4585	0.4629	0.9214
Warm Air Room Heaters	0.2375	0.2173	0.4548
Miscellaneous Commercial/ Residential Combustion	--	0.1498	0.1498

[a]Includes bottled, tank, or LPG

TABLE A-20. WARM AIR FURNACE AND OTHER COMMERCIAL/ RESIDENTIAL COMBUSTION (EJ)

WEST-NORTH-CENTRAL

Warm Air Furnaces	Distillate Oil	Natural Gas[a]	Total Fuel
Warm Air Central Furnaces	0.1146	0.3570	0.4716
Warm Air Room Heaters	0.0593	0.1676	0.2269
Miscellaneous Commercial/ Residential Combustion	--	0.1155	0.1155

[a]Includes bottled, tank, or LPG

EAST-NORTH-CENTRAL

Warm Air Furnaces	Distillate Oil	Natural Gas[a]	Total Fuel
Warm Air Central Furnaces	0.2685	0.9423	1.2108
Warm Air Room Heaters	0.1389	0.4424	0.5813
Miscellaneous Commercial/ Residential Combustion	--	0.3049	0.3049

[a]Includes bottled, tank, or LPG

TABLE A-21. WARM AIR FURNACE AND OTHER COMMERCIAL/ RESIDENTIAL COMBUSTION (EJ)

SOUTH ATLANTIC

Warm Air Furnaces	Distillate Oil	Natural Gas[a]	Total Fuel
Warm Air Central Furnaces	0.1864	0.2226	0.4090
Warm Air Room Heaters	0.0965	0.1045	0.2010
Miscellaneous Commercial/ Residential Combustion	--	0.0720	0.0720

[a]Includes bottled, tank, or LPG

EAST-SOUTH-CENTRAL

Warm Air Furnaces	Distillate Oil	Natural Gas[a]	Total Fuel
Warm Air Central Furnaces	0.0149	0.1573	0.1722
Warm Air Room Heaters	0.0077	0.0738	0.0815
Miscellaneous Commercial/ Residential Combustion	--	0.0509	0.0509

[a]Includes bottled, tank, or LPG

TABLE A-22. WARM AIR FURNACE AND OTHER COMMERCIAL/ RESIDENTIAL COMBUSTION (EJ)

WEST-SOUTH-CENTRAL

Warm Air Furnaces	Distillate Oil	Natural Gas[a]	Total Fuel
Warm Air Central Furnaces	0.0014	0.3004	0.3018
Warm Air Room Heaters	0.0007	0.1410	0.1417
Miscellaneous Commercial/ Residential Combustion	--	0.0972	0.0972

[a]Includes bottled, tank or LPG

MOUNTAIN

Warm Air Furnaces	Distillate Oil	Natural Gas[a]	Total Fuel
Warm Air Central Furnaces	0.0184	0.1640	0.1824
Warm Air Room Heaters	0.0095	0.0770	0.0865
Miscellaneous Commercial/ Residential Combustion	--	0.0530	0.0530

[a]Includes bottled, tank or LPG

PACIFIC

Warm Air Furnaces	Distillate Oil	Natural Gas[a]	Total Fuel
Warm Air Central Furnaces	0.0639	0.4020	0.4659
Warm Air Room Heaters	0.0331	0.1887	0.2218
Miscellaneous Commercial/ Residential Combustion	--	0.1300	0.1300

[a]Includes bottled, tank or LPG

TABLE A-23. GAS TURBINE FUEL CONSUMPTION (EJ)

NEW ENGLAND

Warm Air Furnaces	Natural Gas	Oil[a]	Total
Gas Turbines >15 MW	0.0050	0.0123	0.0173
Gas Turbines 4 MW to 15 MW	0.0001	0.3440	0.3441
Gas Turbines <4 MW	0.0001	0.0001	0.0002

[a]Includes distillate, diesel, residual oils

MIDDLE ATLANTIC

Warm Air Furnaces	Natural Gas	Oil[a]	Total
Gas Turbines >15 MW	0.0362	0.1435	0.1797
Gas Turbines 4 MW to 15 MW	---	0.0200	0.0200
Gas Turbines <4 MW	0.0001	0.0001	0.0002

[a]Includes distillate, diesel, residual oils

TABLE A-24. GAS TURBINE FUEL CONSUMPTION (EJ)

EAST-NORTH-CENTRAL

Warm Air Furnaces	Natural Gas	Oil[a]	Total
Gas Turbines >15 MW	0.0338	0.0235	0.0573
Gas Turbines 4 MW to 15 MW	0.0038	0.0080	0.0118
Gas Turbines <4 MW	0.0002	0.0002	0.0004

[a]Includes distillate, diesel, residual oils

WEST-NORTH-CENTRAL

Warm Air Furnaces	Natural Gas	Oil[a]	Total
Gas Turbines >15 MW	0.0220	0.0051	0.0271
Gas Turbines 4 MW to 15 MW	0.0156	0.0747	0.0903
Gas Turbines <4 MW	0.0001	0.0001	0.0002

[a]Includes distillate, diesel, residual oils

TABLE A-25. GAS TURBINE FUEL CONSUMPTION (EJ)

SOUTH ATLANTIC

Warm Air Furnaces	Natural Gas	Oil[a]	Total
Gas Turbines >15 MW	0.0500	0.0632	0.1132
Gas Turbines 4 MW to 15 MW	0.0006	0.0023	0.0029
Gas Turbines <4 MW	0.0001	0.0001	0.0002

[a]Includes distillate, diesel, residual oils

EAST-SOUTH-CENTRAL

Warm Air Furnaces	Natural Gas	Oil[a]	Total
Gas Turbines >15 MW	0.0170	0.0112	0.0282
Gas Turbines 4 MW to 15 MW	0.0050	0.0025	0.0075
Gas Turbines <4 MW	0.0001	0.0001	0.0002

[a]Includes distillate, diesel, residual oils

TABLE A-26. GAS TURBINE FUEL CONSUMPTION (EJ)

WEST-SOUTH-CENTRAL

Warm Air Furnaces	Natural Gas	Oil[a]	Total
Gas Turbines >15 MW	0.0162	0.0001	0.0163
Gas Turbines 4 MW to 15 MW	0.4052	0.0053	0.4105
Gas Turbines <4 MW	0.0003	0.0003	0.0006

[a]Includes distillate, diesel, residual oils

MOUNTAIN

Warm Air Furnaces	Natural Gas	Oil[a]	Total
Gas Turbines >15 MW	0.0142	0.0026	0.0168
Gas Turbines 4 MW to 15 MW	0.0291	0.1176	0.1467
Gas Turbines <4 MW	0.0001	0.0001	0.0002

[a]Includes distillate, diesel, residual oils

PACIFIC

Warm Air Furnaces	Natural Gas	Oil[a]	Total
Gas Turbines >15 MW	0.0156	0.0025	0.0181
Gas Turbines 4 MW to 15 MW	0.0087	0.0046	0.0133
Gas Turbines <4 MW	0.0001	0.0001	0.0002

[a]Includes distillate, diesel, residual oils

TABLE A-27. RECIPROCATING IC ENGINE FUEL CONSUMPTION (EJ)

NEW ENGLAND

Reciprocating IC Engines	Natural Gas	Distillate Oil (Diesel)	Gasoline	Dual (Oil + Gas)	Total Fuel
Compression Ignition >75 kW/cyl	---	0.0027	---	0.0008 oil 0.0009 gas	0.0044
Spark Ignition >75 kW/cyl	0.0028	---	---	---	0.0028
CI 75 kW to 75 kW/cyl >1000 rpm	---	0.0005	---	---	0.0005
SI 75 kW to 75 kW/cyl >1000 rpm	0.0001	---	---	---	0.0001
CI <75 kW	---	---	---	---	---
SI <75 kW	---	---	---	---	---

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TABLE A-28. RECIPROCATING IC ENGINE FUEL CONSUMPTION (EJ)

MIDDLE ATLANTIC

Reciprocating IC Engines	Natural Gas	Distillate Oil (Diesel)	Gasoline	Dual (Oil + Gas)	Total Fuel
Compression Ignition >75 kW/cyl	---	0.0036	---	0.0011 oil 0.0024 gas	0.0071
Spark Ignition >75 kW/cyl	0.0325	---	---	---	0.0325
CI 75 kW to 75 kW/cyl >1000 rpm	---	---	---	---	---
SI 75 kW to 75 kW/cyl >1000 rpm	0.0001	---	---	---	0.0001
CI <75 kW	---	---	---	---	---
SI <75 kW	---	---	---	---	---

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TABLE A-29. RECIPROCATING IC ENGINE FUEL CONSUMPTION (EJ)

EAST-NORTH-CENTRAL

Reciprocating IC Engines	Natural Gas	Distillate Oil (Diesel)	Gasoline	Dual (Oil + Gas)	Total Fuel
Compression Ignition >75 kW/cyl	---	0.0075	---	0.0019 oil 0.0083 gas	0.0177
Spark Ignition >75 kW/cyl	0.0833	---	---	---	0.0833
CI 75 kW to 75 kW/cyl >1000 rpm	---	0.0085	---	---	0.0085
SI 75 kW to 75 kW/cyl >1000 rpm	0.0007	---	0.0480	---	0.0487
CI <75 kW	---	---	---	---	---
SI <75 kW	---	---	0.0280	---	0.0280

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TABLE A-30. RECIPROCATING IC ENGINE FUEL CONSUMPTION (EJ)

WEST-NORTH-CENTRAL

Reciprocating IC Engines	Natural Gas	Distillate Oil (Diesel)	Gasoline	Dual (Oil + Gas)	Total Fuel
Compression Ignition >75 kW/cyl	---	0.0152	---	0.0022 oil 0.0145 gas	0.0319
Spark Ignition >75 kW/cyl	0.1144	---	---	---	0.1144
CI 75 kW to 75 kW/cyl >1000 rpm	---	0.0778	---	---	0.0778
SI 75 kW to 75 kW/cyl >1000 rpm	0.0014	---	0.0004	---	0.0018
CI <75 kW	---	---	---	---	---
SI <75 kW	---	---	0.0003	---	0.0003

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TABLE A-31. RECIPROCATING IC ENGINE FUEL CONSUMPTION (EJ)

SOUTH ATLANTIC

Reciprocating IC Engines	Natural Gas	Distillate Oil (Diesel)	Gasoline	Dual (Oil + Gas)	Total Fuel
Compression Ignition >75 kW/cyl	---	0.0004	---	0.0012 oil 0.0039 gas	0.0055
Spark Ignition >75 kW/cyl	0.0454	---	---	---	0.0454
CI 75 kW to 75 kW/cyl >1000 rpm	---	0.0014	---	---	0.0014
SI 75 kW to 75 kW/cyl >1000 rpm	0.0004	---	---	---	0.0004
CI <75 kW	---	---	---	---	---
SI <75 kW	---	---	---	---	---

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TABLE A-32. RECIPROCATING IC ENGINE FUEL CONSUMPTION (EJ)

EAST-SOUTH-CENTRAL

Reciprocating IC Engines	Natural Gas	Distillate Oil (Diesel)	Gasoline	Dual (Oil + Gas)	Total Fuel
Compression Ignition >75 kW/cyl	---	0.0033	---	0.0009 oil 0.0047 gas	0.0089
Spark Ignition >75 kW/cyl	0.0755	---	---	---	0.0755
CI 75 kW to 75 kW/cyl >1000 rpm	---	---	---	---	---
SI 75 kW to 75 kW/cyl >1000 rpm	0.0006	---	---	---	0.0006
CI <75 kW	---	---	---	---	---
SI <75 kW	---	---	---	---	---

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TABLE A-33. RECIPROCATING IC ENGINE FUEL CONSUMPTION (EJ)

WEST-SOUTH-CENTRAL

Reciprocating IC Engines	Natural Gas	Distillate Oil (Diesel)	Gasoline	Dual (Oil + Gas)	Total Fuel
Compression Ignition >75 kW/cyl	---	0.0101	---	0.0029 oil 0.0168 gas	0.0298
Spark Ignition >75 kW/cyl	0.3594	---	---	---	0.3594
CI 75 kW to 75 kW/cyl >1000 rpm	---	0.0001	---	---	0.0001
SI 75 kW to 75 kW/cyl >1000 rpm	0.0344	---	0.0200	---	0.0544
CI <75 kW	---	---	---	---	---
SI <75 kW	---	---	0.0116	---	0.0116

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TABLE A-34. RECIPROCATING IC ENGINE FUEL CONSUMPTION (EJ)

MOUNTAIN

Reciprocating IC Engines	Natural Gas	Distillate Oil (Diesel)	Gasoline	Dual (Oil + Gas)	Total Fuel
Compression Ignition >75 kW/cyl	---	0.0053	---	0.0009 oil 0.0048 gas	0.0110
Spark Ignition >75 kW/cyl	0.0764	---	---	---	0.0746
CI 75 kW to 75 kW/cyl >1000 rpm	---	0.0240	---	---	0.0240
SI 75 kW to 75 kW/cyl >1000 rpm	0.0034	---	0.0155	---	0.0189
CI <75 kW	---	---	---	---	---
SI <75 kW	---	---	0.0090	---	0.0090

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TABLE A-35. RECIPROCATING IC ENGINE FUEL CONSUMPTION (EJ)

PACIFIC

Reciprocating IC Engines	Natural Gas	Distillate Oil (Diesel)	Gasoline	Dual (Oil + Gas)	Total Fuel
Compression Ignition >75 kW/cyl	---	0.0023	---	0.0002 oil 0.0016 gas	0.0041
Spark Ignition >75 kW/cyl	0.0234	---	---	---	0.0234
CI 75 kW to 75 kW/cyl >1000 rpm	---	0.0168	---	---	0.0168
SI 75 kW to 75 kW/cyl >1000 rpm	0.0020	---	---	---	0.0020
CI <75 kW	---	---	---	---	---
SI <75 kW	---	---	---	---	---

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TABLE A-36. INDUSTRIAL PROCESS HEATING PRODUCTION[a]

NEW ENGLAND

Industrial Process Heating	Annual Production
Cement Kilns	0.1080×10^7 Mg
Glass Melting Furnaces	0.2936×10^7 Mg
Glass Annealing Lehrs	0.2936×10^7 Mg
Coke Oven Underfire	2.3660×10^7 Mg
Steel Sintering Machines	0.0180×10^7 Mg
Open Hearth Furnaces	---
Brick and Ceramic Kilns	0.0440×10^7 Mg
Catalytic Cracking	---
Refinery Flares	---
Iron and Steel Flares	11.770 x Mg NO_x/yr[b]

[a]Refinery Process Heating fuel consumption in New England was negligible

[b]NO_x estimates

TABLE A-37. INDUSTRIAL PROCESS HEATING PRODUCTION

MIDDLE ATLANTIC

Industrial Process Heating	Annual Production
Cement Kilns	0.8310×10^7 Mg
Glass Melting Furnaces	0.2936×10^7 Mg
Glass Annealing Lehrs	0.2936×10^7 Mg
Coke Oven Underfire	2.3660×10^7 Mg
Steel Sintering Machines	0.1585×10^7 Mg
Open Hearth Furnaces	1.1651×10^7 Mg
Brick and Ceramic Kilns	0.3411×10^7 Mg
Catalytic Cracking	0.2502×10^{11} ℓ feed
Refinery Flares	848.00 Mg NO_x/yr[a]
Iron and Steel Flares	103.90 Mg NO_x/yr[a]

[a] NO_x estimates

REFINERY PROCESS HEATING FUEL CONSUMPTION (EJ)

MIDDLE ATLANTIC

Heater Type	Gas Fuel	Oil Fuel	Total
Natural Draft	0.137	0.028	0.165
Forced Draft	0.140	0.009	0.149
Total	0.277	0.037	0.314

TABLE A-38. INDUSTRIAL PROCESS HEATING PRODUCTION

EAST-NORTH CENTRAL

Industrial Process Heating	Annual Production
Cement Kilns	1.5930×10^7 Mg
Glass Melting Furnaces	0.2927×10^7 Mg
Glass Annealing Lehrs	0.2927×10^7 Mg
Coke Oven Underfire	1.8753×10^7 Mg
Steel Sintering Machines	0.2336×10^7 Mg
Open Hearth Furnaces	1.3940×10^7 Mg
Brick and Ceramic Kilns	0.6537×10^7 Mg
Catalytic Cracking	0.4239×10^{11} ℓ feed
Refinery Flares	1436.6 Mg NO_x/yr[a]
Iron and Steel Flares	153.00 Mg NO_x/yr[a]

[a] NO_x estimates

REFINERY PROCESS HEATING FUEL CONSUMPTION (EJ)

EAST-NORTH-CENTRAL

Heater Type	Gas Fuel	Oil Fuel	Total
Natural Draft	0.207	0.047	0.254
Forced Draft	0.024	0.015	0.039
Total	0.231	0.062	0.293

TABLE A-39. INDUSTRIAL PROCESS HEATING PRODUCTION

WEST-NORTH-CENTRAL

Industrial Process Heating	Annual Production
Cement Kilns	0.4160×10^7 Mg
Glass Melting Furnaces	0.1874×10^7 Mg
Glass Annealing Lehrs	0.1874×10^7 Mg
Coke Oven Underfire	0.3637×10^7 Mg
Steel Sintering Machines	0.0117×10^7 Mg
Open Hearth Furnaces	---
Brick and Ceramic Kilns	0.1705×10^7 Mg
Catalytic Cracking	0.1076×10^{11} ℓ feed
Refinery Flares	364.60 Mg NO_x/yr[a]
Iron and Steel Flares	7.6970 Mg NO_x/yr[a]

[a] NO_x estimates

REFINERY PROCESS HEATING FUEL CONSUMPTION (EJ)

WEST-NORTH-CENTRAL

Heater Type	Gas Fuel	Oil Fuel	Total
Natural Draft	0.052	0.012	0.064
Forced Draft	0.006	0.004	0.010
Total	0.058	0.016	0.074

TABLE A-40. INDUSTRIAL PROCESS HEATING PRODUCTION

SOUTH ATLANTIC

Industrial Process Heating	Annual Production
Cement Kilns	0.7360×10^7 Mg
Glass Melting Furnaces	0.1730×10^7 Mg
Glass Annealing Lehrs	0.1730×10^7 Mg
Coke Oven Underfire	0.7560×10^7 Mg
Steel Sintering Machines	0.0127×10^7 Mg
Open Hearth Furnaces	0.1242×10^7 Mg
Brick and Ceramic Kilns	0.3016×10^7 Mg
Catalytic Cracking	0.0273×10^{11} ℓ feed
Refinery Flares	92.490 Mg NO_x/yr[a]
Iron and Steel Flares	8.3320 Mg NO_x/yr[a]

[a] NO_x estimates

REFINERY PROCESS HEATING FUEL CONSUMPTION (EJ)

SOUTH ATLANTIC

Heater Type	Gas Fuel	Oil Fuel	Total
Natural Draft	0.013	0.003	0.016
Forced Draft	0.002	0.001	0.003
Total	0.015	0.004	0.019

TABLE A-41. INDUSTRIAL PROCESS HEATING PRODUCTION

EAST-SOUTH-CENTRAL

Industrial Process Heating	Annual Production
Cement Kilns	0.4630×10^7 Mg
Glass Melting Furnaces	0.2665×10^7 Mg
Glass Annealing Lehrs	0.2665×10^7 Mg
Coke Oven Underfire	---
Steel Sintering Machines	0.0127×10^7 Mg
Open Hearth Furnaces	0.1242×10^7 Mg
Brick and Ceramic Kilns	0.1901×10^7 Mg
Catalytic Cracking	0.0757×10^{11} Mg
Refinery Flares	256.50 Mg NO_x/yr[a]
Iron and Steel Flares	8.3320 Mg NO_x/yr[a]

[a] NO_x estimates

REFINERY PROCESS HEATING FUEL CONSUMPTION (EJ)

EAST-SOUTH-CENTRAL

Heater Type	Gas Fuel	Oil Fuel	Total
Natural Draft	0.037	0.008	0.045
Forced Draft	0.004	0.003	0.007
Total	0.041	0.011	0.052

TABLE A-42. INDUSTRIAL PROCESS HEATING PRODUCTION

WEST-SOUTH-CENTRAL

Industrial Process Heating	Annual Production
Cement Kilns	2.6160×10^7 Mg
Glass Melting Furnaces	0.2378×10^7 Mg
Glass Annealing Lehrs	0.2378×10^7 Mg
Coke Oven Underfire	---
Steel Sintering Machines	0.0064×10^7 Mg
Open Hearth Furnaces	0.1242×10^7 Mg
Brick and Ceramic Kilns	1.0731×10^7 Mg
Catalytic Cracking	1.0690×10^{11} ℓ feed
Refinery Flares	3621.0 Mg NO_x/yr[a]
Iron and Steel Flares	4.1660 Mg NO_x/yr[a]

[a] NO_x estimates

REFINERY PROCESS HEATING FUEL CONSUMPTION (EJ)

WEST-SOUTH-CENTRAL

Heater Type	Gas Fuel	Oil Fuel	Total
Natural Draft	0.521	0.119	0.640
Forced Draft	0.060	0.038	0.098
Total	0.581	0.157	0.738

TABLE A-43. INDUSTRIAL PROCESS HEATING PRODUCTION[a]

MOUNTAIN

Industrial Process Heating	Annual Production
Cement Kilns	0.349×10^7 Mg
Glass Melting Furnaces	---
Glass Annealing Lehrs	---
Coke Oven Underfire	0.2280×10^7 Mg
Steel Sintering Machines	0.0157×10^7 Mg
Open Hearth Furnaces	0.1242×10^7 Mg
Brick and Ceramic Kilns	0.1434×10^7 Mg
Catalytic Cracking	---
Refinery Flares	---
Iron and Steel Flares	10.300 Mg NO_x/yr[b]

[a]Refinery Process Heating Fuel Consumption in the Mountain Region is negligible

[b]NO_x estimates

TABLE A-44. INDUSTRIAL PROCESS HEATING PRODUCTION

PACIFIC

Industrial Process Heating	Annual Production
Cement Kilns	0.5890×10^7 Mg
Glass Melting Furnaces	0.0910×10^7 Mg
Glass Annealing Lehrs	0.0910×10^7 Mg
Coke Oven Underfire	0.1095×10^7 Mg
Steel Sintering Machines	0.0157×10^7 Mg
Open Hearth Furnaces	0.2482×10^7 Mg
Brick and Ceramic Kilns	0.2416×10^7 Mg
Catalytic Cracking	0.3448×10^{11} feed
Refinery Flares	1168.0 Mg NO_x/yr[a]
Iron and Steel Flares	10.300 Mg NO_x/yr[a]

[a] NO_x estimates

REFINERY PROCESS HEATING FUEL CONSUMPTION (EJ)

PACIFIC

Heater Type	Gas Fuel	Oil Fuel	Total
Natural Draft	0.116	0.039	0.155
Forced Draft	0.019	0.012	0.031
Total	0.135	0.051	0.186

APPENDIX B

NATIONAL FUEL CONSUMPTION TABLES FOR 1985, 2000

Appendix B gives national fuel consumption for 1985 and 2000. Tabular summaries are presented as follows:

- National fuel consumption for 1985 -- Tables B-1 to B-6
- National fuel consumption for 2000 -- Tables B-7 to B-12

These summaries represent the reference high nuclear scenario. Sections 3.4 and 3.5 present the rationale for choosing these values as well as their respective uncertainties. Future fuel consumption estimates are used in Section 4 to project emissions nationally through the year 2000 and in Section 5 to evaluate future pollution potential from stationary combustion sources. Again, it should be realized that these values do not reflect total energy consumed by stationary sources since electrical inputs from nonfossil-fuel sources are excluded.

TABLE B-1. UTILITY BOILER FUEL CONSUMPTION (EJ)
REFERENCE CASE -- HIGH NUCLEAR FOR 1985

Utility Boilers	Medium Sulfur Bituminous and Subbituminous	High Sulfur Bituminous and Subbituminous	Low Sulfur Bituminous and Subbituminous	Lignite	Anthracite	Total Coal	High Sulfur Residual and Crude	Medium Sulfur Residual and Crude	Low Sulfur Residual and Crude	Total Residual and Crude	Distillate	Total Oil	Natural Gas	Total All Fuels
Tangential	5.225	3.154	1.730	0.105	--	10.214	0.156	0.392	0.506	1.054	0.029	1.083	0.753	12.050
Single Wall-Fired	3.013	1.820	0.998	0.022	--	5.853	0.156	0.393	0.507	1.056	0.135	1.191	1.628	8.672
Opposed Wall and Turbo Furnace	0.842	0.508	0.279	0.042	--	1.671	0.063	0.159	0.205	0.427	0.012	0.439	0.835	2.945
Cyclone	0.126	1.034	--	0.110	--	1.270	0.010	0.022	0.030	0.062	--	0.062	0.049	1.381
Vertical and Stoker	0.087	0.088	--	0.007	0.087	0.269	--	--	--	--	--	--	--	0.269

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TABLE B-2. PACKAGED BOILER FUEL CONSUMPTION (EJ)
REFERENCE CASE -- HIGH NUCLEAR FOR 1985

Packaged Boilers	Anthracite	Bituminous or Lignite	Total Coal	Residual Oil	Distillate Oil	Total Oil	Natural Gas	Process Gas	Total Fuel
Wall-firing Watertubes >29 MW[a]	--	0.289	0.289	0.875	0.117	0.992	1.133	0.159	2.573
Stoker Watertubes >29 MW[a]	--	0.264	0.264	--	--	--	--	--	0.264
Single Burner Watertubes <29 MW[a]	--	0.180	0.180	0.817	0.141	0.958	2.064	0.159	3.361
Scotch Firetubes <29 MW[a]	--	--	--	1.297	0.612	1.909	0.119	0.023	2.051
Single Burner HRT Firetubes <29 MW[a]	--	--	--	0.508	0.361	0.869	0.653	--	1.522
Firebox Firetubes	--	--	--	0.836	0.553	1.389	1.098	0.023	2.510
Cast Iron Boilers	--	--	--	0.268	0.249	0.517	0.322	--	0.839
Stoker Watertubes <29 MW[a]	0.012	0.869	0.881	--	--	--	--	--	0.881
Stoker Firetubes <29 MW[a]	0.024	0.315	0.339	--	--	--	--	--	0.339
Steam or Hot Water Units (Residential Only)	0.008	0.006	0.014	0.095	1.208	1.303	0.900	--	2.217

[a]Heat input

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TABLE B-3(a). WARM AIR FURNACE AND OTHER COMMERCIAL/ RESIDENTIAL COMBUSTION (EJ) REFERENCE CASE -- HIGH NUCLEAR FOR 1985

Warm Air Furnaces	Distillate Oil	Natural Gas[a]	Total Fuel
Warm Air Central Furnaces	1.909	2.648	4.557
Warm Air Room Heaters	0.989	1.243	2.232
Miscellaneous Commercial/ Residential Combustion	---	0.857	0.857

[a]Includes bottled, tank or LPG

TABLE B-3(b). GAS TURBINE FUEL CONSUMPTION (EJ) REFERENCE CASE -- HIGH NUCLEAR FOR 1985

Gas Turbines	Natural Gas	Oil[a]	Total
Gas Turbines >15 MW[b]	0.358	0.440	0.798
Gas Turbines 4 MW to 15 MW[b]	0.609	0.752	1.361
Gas Turbines <4 MW[b]	0.001	0.002	0.003

[a]Includes distillate, diesel, residual oils
[b]Heat output

TABLE B-4. RECIPROCATING IC ENGINE FUEL CONSUMPTION (EJ)
REFERENCE CASE -- HIGH NUCLEAR FOR 1985

Reciprocating IC Engines	Natural Gas	Distillate Oil (Diesel)	Gasoline	Dual (Oil + Gas)	Total Fuel
Compression Ignition >75 kW/cyl[a]	---	0.082	---	0.079 gas 0.017 oil	0.178
Spark Ignition >75 kW/cyl[a]	0.346	---	---	---	0.346
CI 75 kW to 75 kW/cyl[a] >1000 rpm	---	0.166	---	---	0.166
SI 75 kW to 75 kW/cyl[a] >1000 rpm	0.032	---	0.108	---	0.140
CI <75 kW[a]	---	---	---	---	---
SI <75 kW[a]	---	---	0.063	---	0.063

[a]Power output

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TABLE B-5. INDUSTRIAL PROCESS HEATING PRODUCTION (EJ)
REFERENCE CASE -- HIGH NUCLEAR FOR 1985

Industrial Process Heating	Annual Production
Cement Kilns	7.767×10^7 Mg
Glass Melting Furnaces	1.556×10^7 Mg
Glass Annealing Lehrs	1.556×10^7 Mg
Coke Oven Underfire	5.753×10^7 Mg
Steel Sintering Machines	4.896×10^7 Mg
Open Hearth Furnaces	3.257×10^7 Mg
Brick and Ceramic Kilns	3.187×10^7 Mg
Catalytic Cracking	2.315×10^{11} ℓ feed
Refinery Flares	7844 Mg NO_x/yr[a]
Iron and Steel Flares	341 Mg NO_x/yr[a]

[a] NO_x estimates

TABLE B-6. REFINERY PROCESS HEATING FUEL CONSUMPTION (EJ)
REFERENCE CASE -- HIGH NUCLEAR FOR 1985

Heater Type	Gas	Oil	Total Fuel
Natural Draft	1.129	0.259	1.388
Forced Draft	0.129	0.081	0.210
Total	1.258	0.340	1.598

TABLE B-7. UTILITY BOILER FUEL CONSUMPTION (EJ)
REFERENCE CASE -- HIGH NUCLEAR FOR 2000

Utility Boilers	Medium Sulfur Bituminous and Subbituminous	High Sulfur Bituminous and Subbituminous	Low Sulfur Bituminous and Subbituminous	Lignite	Anthracite	Total Coal	High Sulfur Residual and Crude	Medium Sulfur Residual and Crude	Low Sulfur Residual and Crude	Total Residual and Crude	Distillate	Total Oil	Natural Gas	Total All Fuels
Tangential	6.879	4.153	2.278	0.139	--	13.449	0.247	0.620	0.802	1.669	0.045	1.714	--	15.163
Single Wall-Fired	3.967	2.396	1.313	0.029	--	7.705	0.247	0.621	0.803	1.671	0.213	1.884	--	9.589
Opposed Wall and Turbo Furnace	1.109	0.669	0.367	0.055	--	2.200	0.100	0.251	0.325	0.676	0.019	0.695	--	2.895
Cyclone	--	0.764	--	0.081	--	0.845	0.007	0.017	0.022	0.046	--	0.046	--	0.891
Vertical and Stoker	0.065	0.065	--	0.005	0.064	0.199	--	--	--	--	--	--	--	0.199

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TABLE B-8. PACKAGED BOILER FUEL CONSUMPTION (EJ)
REFERENCE CASE -- HIGH NUCLEAR FOR 2000

Packaged Boilers	Anthracite	Bituminous or Lignite	Total Coal	Residual Oil	Distillate Oil	Total Oil	Natural Gas	Process Gas	Total Fuel
Wall Firing Watertubes >29 MW[a]	--	0.406	0.406	0.970	0.129	1.099	1.020	0.143	2.668
Stoker Watertubes >29 MW[a]	--	0.371	0.371	--	--	--	--	--	0.371
Single Burner Watertubes <29 MW[a]	--	0.252	0.252	0.906	0.157	1.063	1.857	0.143	3.315
Scotch Firetubes <29 MW[a]	--	--	--	1.439	0.679	2.118	1.068	0.021	3.207
HRT Firetubes <29 MW[a]	--	--	--	0.563	0.400	0.963	0.588	--	1.551
Firebox Firetubes	--	--	--	0.927	0.614	1.541	0.988	0.021	2.550
Cast Iron Boilers	--	--	--	0.297	0.276	0.573	0.290	--	0.863
Stoker Watertubes <29 MW[a]	0.017	1.221	1.238	--	--	--	--	--	1.238
Stoker Firetubes <29 MW[a]	0.033	0.443	0.476	--	--	--	--	--	0.476
Steam or Hot Water Units (Residential Only)	0.011	0.009	0.020	0.105	1.340	1.445	0.810	--	2.275

[a]Heat input

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TABLE B-9(a). WARM AIR FURNACE AND OTHER COMMERICAL/ RESIDENTIAL COMBUSTION (EJ) REFERENCE CASE -- HIGH NUCLEAR FOR 2000.

Warm Air Furnaces	Distillate Oil	Natural Gas	Tctal Fuel
Warm Air Central Furnaces	1.845	3.700	5.545
Warm Air Room Heaters	0.955	1.737	2.692
Miscellaneous Commercial/ Residential Combustion	---	1.197	1.197

[a]Includes bottled, tank or LPG

TABLE B-9(b). GAS TURBINE FUEL CONSUMPTION FOR 2000 (EJ) REFERENCE CASE -- HIGH NUCLEAR FOR 2000

Gas Turbines	Natural Gas	Oil[a]	Total
Gas Turbines >15 MW[b]	0.820	1.048	1.868
Gas Turbines 4 MW to 15 MW[b]	0.569	0.703	1.272
Gas Turbines <4 MW[b]	0.001	0.001	0.002

[a]Includes distillates, diesel, residual oils
[b]Heat output

TABLE B-10. RECIPROCATING IC ENGINE FUEL CONSUMPTION (EJ)
REFERENCE CASE -- HIGH NUCLEAR FOR 2000

Reciprocating IC Engines	Natural Gas	Distillate Oil (Diesel)	Gasoline	Dual (Oil + Gas)	Total Fuel
Compression Ignition >75 kW/cyl[a]	---	0.129	---	0.080 gas 0.028 oil	0.237
Spark Ignition >75 kW/cyl[a]	0.130	---	---	---	0.130
CI 75 kW to 75 kW/cyl[a] >1000 rpm	---	0.155	---	---	0.155
SI 75 kW to 75 kW/cyl[a] >1000 rpm	0.030	---	0.101	---	0.131
CI <75 kW[a]	---	---	---	---	---
SI <75 kW[a]	---	---	0.059	---	0.059

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[a]Heat output

TABLE B-11. INDUSTRIAL PROCESS HEATING PRODUCTION (EJ)
REFERENCE CASE -- HIGH NUCLEAR FOR 2000

Industrial Process Heating	Annual Production
Cement Kilns	9.343×10^7 Mg
Glass Melting Furnaces	1.872×10^7 Mg
Glass Annealing Lehrs	1.872×10^7 Mg
Coke Oven Underfire	1.872×10^7 Mg
Steel Sintering Machines	6.921×10^7 Mg
Open Hearth Furnaces	5.889×10^7 Mg
Brick and Ceramic Kilns	3.918×10^7 Mg
Catalytic Cracking	3.834×10^{11} ℓ feed
Refinery Flares	7942 Mg NO_x/yr[a]
Iron and Steel Flares	386 Mg NO_x/yr[a]

[a] NO_x estimates

TABLE B-12. REFINERY PROCESS HEATING FUEL CONSUMPTION (EJ)
REFERENCE CASE -- HIGH NUCLEAR FOR 2000

Heater Type	Gas	Oil	Total Fuel
Natural Draft	1.359	0.311	1.670
Forced Draft	0.156	0.098	0.254
Total	1.515	0.409	1.924

APPENDIX C

NATIONAL CRITERIA POLLUTANT EMISSIONS FOR 1974

Appendix C presents criteria pollutant emissions nationally for 1974. Tabular summaries are presented as follows:

- Utility boiler criteria pollutant emissions -- Table C-1
- Packaged boiler criteria pollutant emissions -- Table C-2
- Warm air furnace and miscellaneous combustion criteria pollutant emissions -- Table C-3
- Gas turbine criteria pollutant emissions -- Table C-4
- Reciprocating IC engine criteria pollutant emissions -- Table C-5
- Industrial process heating criteria pollutant emissions -- Table C-6

These emission estimates are derived from the fuel consumption estimates in Section 3.2 and the emission factors developed in Section 4.1. These estimates are for uncontrolled NO_x emissions, whereas, the estimates for SO_x and particulates are controlled.

TABLE C-1. CRITERIA POLLUTANT EMISSIONS FOR THE UTILITY AND LARGE INDUSTRIAL BOILER SECTOR FOR 1974 (Gg) (UNCONTROLLED NO_x)

Furnace Design	Fuel	NO_x	SO_x	HC	CO	Part.
Tangential	Coal	1,409.0	6,999.6	4.8	58.3	3,178.0
	Oil	208.0	583.3	1.4	11.9	30.5
	Gas	146.0	0.3	1.0	8.2	4.8
Wall Fired	Coal	946.0	4,030.6	2.6	64.4	1,734.0
	Oil	481.0	598.6	2.2	20.3	31.1
	Gas	738.3	0.7	2.1	28.2	10.5
Opposed Wall	Coal	270.8	1,131.6	0.9	7.6	499.0
	Oil	175.6	236.0	0.6	6.9	12.9
	Gas	378.7	0.4	1.1	13.4	5.4
Cyclone	Coal	863.5	2,737.4	10.4	30.0	193.0
	Oil	16.6	34.9	0.5	1.2	1.7
	Gas	14.7	0.02	0.4	0.4	0.3
Stoker & Vertical	Coal	93.0	414.7	1.6	18.4	263.9
	Oil	--	--	--	--	--
	Gas	--	--	--	--	--
Totals		5,741.2	16,768.1	29.6	269.2	5,965.0

TABLE C-2. CRITERIA POLLUTANT EMISSIONS FOR THE PACKAGE BOILER SECTOR FOR 1974 (Gg) (UNCONTROLLED NO_x)

Equipment Design Type	Fuel	NO_x	SO_x	HC	CO	Part.
Watertubes	Coal	290.0	1,402.0	3.1	11.7	935.8
29 MW to 73 MW[a]	Oil	232.8	269.0	2.2	2.8	24.3
	Gas	318.5	0.3	3.6	8.4	1.6
Watertubes	Coal	278.2	2,280.0	27.7	34.1	2,787.8
<29 MW	Oil	116.4	298.0	0.6	2.2	24.1
	Gas	180.0	5.7	2.9	14.5	2.9
Firetubes	Coal	107.0	839.0	10.1	15.5	1,016.0
<29 MW	Oil	429.3	1,048.0	2.1	8.4	98.7
	Gas	241.7	0.7	4.1	20.7	6.3
Other[b]	Coal	4.4	20.4	8.2	19.7	8.2
	Oil	107.7	242.0	4.6	28.8	20.8
	Gas	39.0	0.3	3.0	8.6	3.8
Total		2,345.0	6,405.4	72.2	175.4	4,930.3

[a]Heat input

[b]Includes cast iron and residential steam and hot water units

TABLE C-3. CRITERIA POLLUTANT EMISSIONS FOR THE WARM AIR FURNACE AND MISCELLANEOUS COMBUSTION SECTOR FOR 1974 (Gg) (UNCONTROLLED NO_x)

Equipment	Fuel	NO_x	SO_x	HC	CO	Part.
Warm Air Central Furnace	Oil	85.0	152.0	6.5	43.6	10.8
	Gas	107.3	1.1	10.5	36.9	13.2
Warm Air Room Heater	Oil	44.4	78.4	3.4	22.0	5.7
	Gas	49.5	0.4	5.0	17.3	6.2
Miscellaneous Commercial and Residential Combustion	Gas	34.4	0.3	4.3	12.8	3.4
Total		320.6	232.2	29.7	132.6	39.3

TABLE C-4. CRITERIA POLLUTANT EMISSIONS FOR THE GAS TURBINE SECTOR FOR 1974 (Gg) (UNCONTROLLED NO_x)

Equipment Capacity Range	Fuel	NO_x	SO_x	HC	CO	Part.
Gas Turbine >15 MW	Oil	97.4	2.8	2.4	12.4	4.3
	Gas	41.3	0.5	1.8	10.3	1.3
Gas Turbine 4 MW to 15 MW	Oil	209.5	6.2	5.7	27.2	8.9
	Gas	91.2	1.0	3.8	23.1	2.8
Gas Turbine <4 MW	Oil	0.4	0.01	0.02	0.2	0.02
	Gas	0.2	0.002	0.01	0.2	0.007
Total		440.0	10.5	13.7	73.4	17.3

TABLE C-5. CRITERIA POLLUTANT EMISSIONS FOR THE RECIPROCATING IC ENGINE SECTOR FOR 1974 (Gg) (UNCONTROLLED NO_x)

Equipment Capacity Range	Fuel	NO_x	SO_x	HC	CO	Part.
IC Engines >75 kW/cyl	Oil	94.0	5.1	6.1	16.6	5.6
	Gas	1,262.0	0.2	451.0	143.0	--
	Dual	71.6	--	29.1	9.6	--
IC Engines 75 kW to 75 kW/cyl	Oil	225.0	12.3	14.7	40.0	13.1
	Gasoline	100.4	1.2	33.7	1,014.8	1.8
	Gas	66.7	0.1	23.9	7.6	--
IC Engines <75 kW	Gasoline	37.5	0.8	19.6	591.9	1.0
Total		1,857.2	19.6	578.1	1,823.5	21.5

TABLE C-6. CRITERIA POLLUTANT EMISSIONS FOR THE INDUSTRIAL PROCESS HEATING SECTOR FOR 1974 (Gg) (UNCONTROLLED NO_x)

Industrial Equipment Category	NO_x	SO_x	HC	CO	Part.
Refinery Heaters	147.3	22.7	20.5	--	37.2
Cement Kilns	100.0	39.2	--	--	112.0
Glass Melting Furnaces	56.7	32.2	--	--	15.2
Glass Annealing Lehrs	10.6	--	--	--	--
Coke Oven Underfire	4.0	132.2	--	--	2,149.0
Steel Sintering Lines	25.2	34.1	--	106.7	48.5
Open Hearth Furnaces	20.6	22.6	--	--	193.6
Brick & Ceramic Kilns	7.9	16.5	1.3	3.2	2,052.7
Catalytic Cracking	46.0	323.0	144.5	8,969.5	158.2
Refinery Flares	7.8	--	--	--	--
Iron & Steel Flares	0.3	--	--	--	--
Total	426.4	622.5	166.3	9,079.4	4,766.0

APPENDIX D

EMISSION INVENTORY

Summary emission tables are presented in Section 4. A complete listing of emissions of the 29 pollutants considered for each equipment type, together with emission factors and NO_x control factors, is given in this appendix which has been subdivided into three parts.

D.1 NONCRITERIA POLLUTANT EMISSION FACTORS

Emission factors for noncriteria pollutants for utility boilers are presented in Tables D-1 and D-2. Factors for packaged boilers and warm air furnaces are in Tables D-3 and D-4, respectively. Trace element emissions were not computed for other equipment types.

D.2 FORMULATION OF NO_x EMISSION CONTROL FACTORS

Controlled NO_x emissions from a particular source type (A) firing a particular fuel (B) were calculated as:

$$\text{Emissions} = \underbrace{(FC) \times (UEF) \sum_i fi \frac{EFi}{UEF}}_{\text{Term 1}} + \underbrace{(1 - \sum_i fi) \times (FC) \times (UEF)}_{\text{Term 2}} \qquad \text{(D-1)}$$

where FC = total fuel consumption of fuel "B" in sources of the type "A"

UEF = uncontrolled emission factor for source/fuel "A/B"

TABLE D-1. SECTOR I NONCRITERIA POLLUTANT EMISSION FACTORS

Equipment Type	Sulfates (ng/J)	POM's Range (pg/J)	Dry Removal Ash (μg/J)[a]	Liquid Removal Ash (μg/J)[a]
Utility Boilers				
Tangential				
Anthracite	4.73	0.96 to 121.30	0.59	2.36
Bituminous	16.80	0.96 to 121.30	0.52	2.09
Lignite	3.01	0.96 to 121.30	0.37	1.46
Residual Oil	12.90	0.86 to 0.86		
Distillate Oil	3.01	0.86 to 0.86		
Natural Gas		0.31 to 27.48		
Single Wall Fired				
Anthracite	4.73	0.40 to 121.30	0.59	2.36
Bituminous	16.80	0.40 to 121.30	0.52	2.09
Lignite	3.01	0.40 to 121.30	0.37	1.46
Residual Oil	12.90	0.86 to 0.86		
Distillate Oil	3.01	0.86 to 0.86		
Natural Gas		0.31 to 27.48		
Opposed Wall and Turbo Furnace				
Anthracite	4.73	0.40 to 121.30	0.59	2.36
Bituminous	16.80	0.40 to 121.30	0.52	2.09
Lignite	3.01	0.40 to 121.30	0.37	1.46
Residual Oil	12.90	0.86 to 0.86		
Distillate Oil	3.01	0.86 to 0.86		
Natural Gas		0.31 to 27.48		
Cyclone				
Anthracite	4.73	1.84 to 1.84	0.59	2.36
Bituminous & Sub-bituminous	16.80	1.84 to 1.84	0.52	2.09
Lignite	3.01	1.84 to 1.84	0.37	1.46
Residual Oil	12.90	0.86 to 0.86		
Distillate Oil	3.01	0.86 to 0.86		
Natural Gas		0.31 to 0.31		
Vertical & Stoker				
Anthracite	4.73	0.47 to 121.30	0.59	2.36
Bituminous & Sub-bituminous	16.80	0.47 to 121.30	0.52	2.09
Lignite	3.01	0.47 to 121.30	0.37	1.46
Residual Oil	12.90	0.86 to 0.86		
Distillate Oil	3.01	0.86 to 0.86		
Natural Gas		0.31 to 0.86		

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[a]Ash generation factors based on 65 percent flyash of coal ash and 70 percent collection efficiency. Assumed 80 percent of utilities use sluice (wet) removal and 20 percent dry removal (Reference D-1).

TABLE D-2. METAL EMISSION FACTORS (ng/J) – SECTOR I

	Al	Sb	As	Ba	Be	Bi	B	Cd	Co	Cr
Utility Boilers										
Anthracite		0.8×10^{-3}	77.4×10^{-3}	266.5×10^{-3}	23.2×10^{-3}	0.8×10^{-3}	7.8×10^{-3}	1.1×10^{-3}	275.1×10^{-3}	902.8×10^{-3}
Bituminous	86.0	12.0×10^{-3}	133.3×10^{-3}	193.5×10^{-3}	15.5×10^{-3}	9.02×10^{-3}	1.02	36.1×10^{-3}	32.7×10^{-3}	128.9×10^{-3}
Lignite	81.6	5.6×10^{-3}	107.5×10^{-3}	2450.0	20.2×10^{-3}	21.5×10^{-3}	558.9×40^{-3}	3.8×10^{-3}	34.6×10^{-3}	94.6×10^{-3}
Residual Oil	3.7	1.2×10^{-3}	1.2×10^{-3}	141.9×10^{-3}			18.5×10^{-3}	1.7×10^{-3}	73.1×10^{-3}	184.9×10^{-3}

Equipment Type	Cu	Pb	Mn	Hg	Mo	Ni	Se	V	Zn	Zr
Utility Boilers										
Anthracite	558.9×10^{-3}	98.9×10^{-3}	1419.0×10^{-3}	8.2×10^{-3}	77.4×10^{-3}	382.6×10^{-3}	4.3×10^{-3}	120.4×10^{-3}	0.3	0.1
Bituminous	356.8×10^{-3}	176.3×10^{-3}	472.9×10^{-3}	6.9×10^{-3}	73.1×10^{-3}	202.1×10^{-3}	51.6×10^{-3}	356.8×10^{-3}	2.8	0.3
Lignite	202.1×10^{-3}	111.8×10^{-3}	417.0×10^{-3}	3.4×10^{-3}	22.8×10^{-3}	98.9×10^{-3}	47.3×10^{-3}	257.9×10^{-3}	0.8	0.4
Residual Oil	150.5×10^{-3}	167.7×10^{-3}	150.5×10^{-3}	2.2×10^{-3}	150.5×10^{-3}	8.6×10^{-3}	171.9×10^{-3}	12.9	0.2	0.1

TABLE D-3. PACKAGED BOILER SULFATE AND POM EMISSIONS FACTORS AND LIQUID AND SOLID ASH STREAM GENERATION FACTORS

Equipment Type	Sulfates (ng/J)	POM's Range (pg/J)	Dry Removal Ash (g/J)[a]	Liquid Removal Ash (g/J)[a]
Wall Firing Watertubes >29 MW[b]				
Anthracite	4.73	1.217	0.493	1.980
Bituminous & Lignite	16.80	1.217	0.493	1.980
Residual Oil	12.90	1.206		
Distillate Oil	3.01	1.206		
Natural Gas	0.00	0.310 to 27.380		
Stoker Firing Watertubes >29 MW[b]				
Anthracite	4.73	14.330	1.845	
Bituminous & Lignite	16.80	14.330	1.845	
Single Burner Watertubes <29 MW[b]				
Residual		1.206		
Distillate		1.206		
Natural Gas		0.310 to 27.380		
Scotch Firetubes				
Residual		9.730 to 12,795		
Distillate		9.730 to 12,795		
Natural Gas		0.310 to 17.400		
Other				
Firebox Firetubes				
Residual		9.730 to 12,795		
Distillate		9.730 to 12,795		
Natural Gas		0.279 to 27.400		
Cast Iron Boilers				
Residual		14.900		
Distillate		14.900		
Natural Gas		0.279		
Stoker Firing Watertubes <29 MW[b]				
Anthracite		40.560		
Bituminous & Lignite		40.560		
Stoker Firing Firetubes				
Anthracite		40.560 to 3,354.0		
Bituminous & Lignite		40.560 to 3,354.0		

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[a]Ash generation factors based on 65 percent flyash of coal ash and 70 percent collection efficiency. Assumed 80 percent of units use sluice water ash removal, 20 percent dry removal.

[b]Heat input

TABLE D-4. WARM AIR FURNACE POM EMISSIONS FACTORS (pg/J)

Equipment Type	Fuel	POMs (pg/J)
Warm Air Central Furnaces	Oil	7.800
	Natural Gas	0.327
Warm Air Room Heaters	Oil	--
	Natural Gas	27.46
Miscellaneous Combustion	Natural Gas	27.46

fi = fraction of FC burned in controlled sources located in region "i"

EFi = regulated emission factor assuming 100 percent compliance for sources of type "A/B" in region "i" (EFi < UEF)

The first term is a sum over all regions "i" in which local control regulations demand an emission factor lower than the uncontrolled value. The second term accounts for the uncontrolled sources.

In calculating the values fi, it was assumed that if a fraction "x" of a particular fuel (e.g., residual oil) was consumed in region "i", the fraction was equally distributed among the utility boilers firing that fuel located within the region regardless of firing type.

The form of the emission equation can be put into the convenient form

$$\text{Emissions} = (FC) \times (UEF) \times (1 - C_1)$$

where

$$C_1 = \sum_i fi \left(1 - \frac{EFi}{UEF}\right) \qquad \text{(D-2)}$$

C_1, then, is the factor by which controlled NO_x emissions are lower than uncontrolled.

D.3 EMISSION INVENTORY

The emission inventory of Section 4 was computed by calculating the emissions of 29 pollutants from a variety of sources which fire a number

of different fuels. Summary tables are presented in Section 4 and a complete listing is given here.

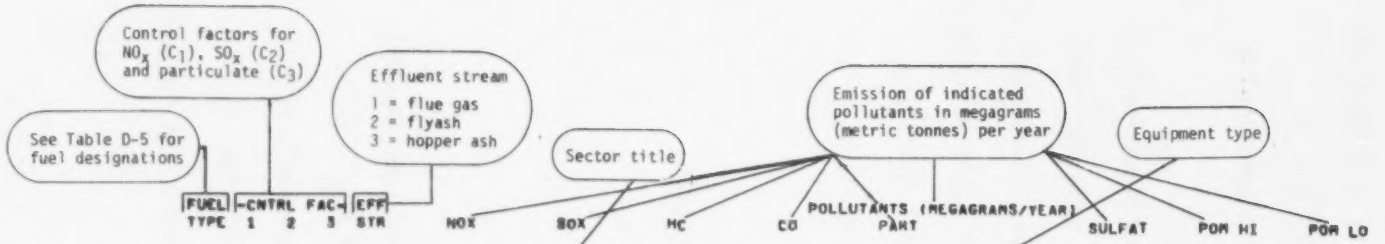
The computer program which was utilized considered each source/fuel combination in turn. Flue gas emissions were calculated as a product of (fuel consumption) x (emission factor) x $(1 - C_i)$ where C_i is a control factor. Collected flyash was calculted as (fuel consumption) x (emission factor) x C_3.

After calculating emissions of each pollutant for each source/fuel combination, sector totals were calculated and listed for each fuel and effluent stream. Finally, a grand total for all sectors was calculated.

An annotated sample page of the output is shown in Figure D-1 and a list of fuel type codes is given in Table D-5. The complete emissions listing is given in Tables D-6 through D-9. The table in which a particular pollutant species is found follows:

Table D-6 Pollutant Group i	NO_x SO_x H_c CO Part. Sulfate POM
Table D-7 Pollutant Group ii	Ba Be B Cr Co Cu Pb Mn Hg Mo
Table D-8 Pollutant Group iii	Ni V Zn Zr As Bi Al Sb Cd Se
Table D-9 Pollutant Group iv	P Sr

NO_x emissions for utility boilers were calculated with an assumed control level (C_1) described in Section D.2. Uncontrolled NO_x emissions can be calculated by dividing the controlled emissions listed here by $(1 - C_1)$. C_1 is listed for each boiler/fuel combination. Since the tables were generated from a computer listing, emissions for one equipment type sometimes overlap two pages.



		SECTOR	1 - UTILITY BOILERS				EQUIPMENT TYPE	101 - TANGENTIAL BOILERS				
2		.65	1	.72160+06	.34752+07	.22566+04	.29389+05	.16476+07		.44045+05	.31622+03	.25297+01
2		.65	2					.30598+07				
3		.65	1	.43560+06	.26780+07	.13622+04	.17741+05	.97297+06		.34087+05	.19089+03	.15271+01
3		.65	2					.18069+07				
4		.65	1	.23898+06	.83702+06	.74734+03	.97328+04	.51599+06		.12716+05	.10472+03	.83778+00
4		.65	2					.95827+06				
5		.65	1	.12985+05	.17130+05	.43960+03	.14363+04	.81552+05		.15968+03	.63870+01	.51096-01
5		.65	2					.77168+05				
6	.01	.25	1	.29568+05	.18894+06	.16856+03	.16856+04	.44835+04		.50614+04	.16871+00	.16871+00
6	.01	.25	2					.14945+04				
7	.01	.25	1	.74222+05	.23714+06	.42312+03	.42312+04	.11254+05		.63526+04	.42351+00	.42351+00
7	.01	.25	2					.37515+04				
8	.01	.25	1	.95996+05	.15328+06	.54696+03	.54696+04	.14548+05		.81059+04	.54746+00	.54746+00
8	.01	.25	2					.48495+04				
9	.01		1	.94309+04	.39060+04	.21600+03	.55800+03	.21600+03		.10846+03	.30988-01	.30988-01
10	.06		1	.13795+06	.34020+03	.97524+03	.82782+04	.98762+04			.31041+02	.35141+00
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --												
1 FLUE GAS				.17523+07	.75830+07	.71307+04	.78521+05	.32135+07		.10664+06	.65043+03	.64678+01
2 FLYASH COLLECTN								.59123+07				
		SECTOR	1 - UTILITY BOILERS				EQUIPMENT TYPE	102 - WALL FIRED BOILER				
2		.65	1	.48650+06	.20038+07	.13012+04	.33135+05	.90617+06		.25396+05	.18233+03	.60234+00
2		.65	2					.16829+07				
3		.65	1	.29390+06	.15486+07	.78604+03	.20017+05	.53551+06		.19669+05	.11015+03	.36387+00
3		.65	2					.99852+06				
4		.65	1	.16110+06	.48256+06	.43086+03	.10972+05	.28375+06		.73313+04	.60375+02	.19945+00
4		.65	2					.52697+06				
5		.65	1	.38830+04	.35552+04	.90200+02	.29810+03	.86240+04		.33140+02	.13256+01	.43792-02
5		.65	2					.16016+05				
6	.09	.25	1	.60083+05	.18894+06	.16856+03	.26068+04	.44835+04		.50614+04	.16871+00	.16871+00
6	.09	.25	2					.14945+04				
7	.05	.25	1	.15113+06	.23763+06	.42398+03	.65969+04	.11277+05		.63655+04	.42437+00	.42437+00
7	.05	.25	2					.37591+04				
8	.05	.25	1	.19527+06	.15352+06	.54782+03	.84721+04	.14571+05		.81129+04	.54852+00	.54852+00
8	.05	.25	2					.48571+04				
9	.05		1	.51406+05	.18336+05	.10148+04	.26195+04	.10140+04		.50915+03	.14547+00	.14547-02
10	.12		1	.66680+06	.73590+03	.21096+04	.28455+05	.10548+05			.67146+02	.76014+00
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --												
1 FLUE GAS				.20505+07	.96297+07	.68722+04	.11313+06	.17759+07		.68478+05	.42261+03	.38738+01
2 FLYASH COLLECTN								.32305+07				
		SECTOR	1 - UTILITY BOILERS				EQUIPMENT TYPE	103 - OPPOSED WALL BOILER				
2		.65	1	.13602+06	.56022+06	.36378+03	.36378+04	.25334+06		.71002+04	.50976+02	.16848+00
2		.65	2					.47049+06				
3		.65	1	.81995+05	.42983+06	.21930+03	.21930+04	.14980+06		.54875+04	.30730+02	.10152+00
3		.65	2					.27747+06				
4		.65	1	.45017+05	.13485+06	.12040+03	.12040+04	.79292+05		.20487+04	.16871+02	.55736-01
4		.65	2					.14726+06				

Figure D-1. Sample emission listing.

TABLE D-5. FUEL TYPE CODES

1.	Anthracite
2.	Eastern Bituminous
3.	Central Bituminous
4.	Western Bituminous
5.	Lignite
6.	High Sulfur Residual Oil
7.	Medium Sulfur Residual Oil
8.	Low Sulfur Residual Oil
9.	Distillate Oil
10.	Natural Gas
11.	Process Gas
12.	Gasoline
13.	Processed Material[a]
14.	Coal (Bituminous or Lignite)
15.	Residual Oil
16.	Oil (Residual or Distillate)
17.	Dual Fuel (Oil and Gas)

[a]Emission factors for industrial process heating are typically in units of "Grams of Pollutant per Gram of Product Produced." The corresponding "fuel consumption" then has units of "grams of product processed." In this way, all emissions can be calculated as ("fuel consumption") x (emission factor).

TABLE D-6. EMISSIONS INVENTORY -- POLLUTANT GROUP 1

FUEL TYPE	CNTRL 1	CNTRL 2	CNTRL 3	EFF STR	NOX	SOX	HC	CO	PART	SULFAT	POM HI	POM LO
					POLLUTANTS (MEGAGRAMS/YEAR)							
	SECTOR 1 - UTILITY BOILERS				EQUIPMENT TYPE 101 - TANGENTIAL BOILERS							
2		.65	1		.72160+06	.38752+07	.22566+04	.29389+05	.16476+07	.44045+05	.31622+03	.25297+01
2		.65	2						.30598+07			
3		.65	1		.43560+06	.26700+07	.13622+04	.17741+05	.97297+06	.34087+05	.19089+03	.15271+01
3		.65	2						.18069+07			
4		.65	1		.23898+06	.83702+06	.74734+03	.97328+04	.51599+06	.12716+05	.10472+03	.83778+00
4		.65	2						.95827+06			
5		.65	1		.12985+05	.17130+05	.43960+03	.19363+04	.81552+05	.15968+03	.63870+01	.51096+01
5		.65	2						.77168+05			
6	.01	.25	1		.29568+05	.18894+06	.16856+03	.16856+04	.44835+04	.50618+04	.16871+00	.16871+00
6	.01	.25	2						.14945+04			
7	.01	.25	1		.74222+05	.23719+06	.42312+03	.42312+04	.11234+05	.63526+04	.42351+00	.42351+00
7	.01	.25	2						.37515+04			
8	.01	.25	1		.95966+05	.15328+06	.54696+03	.54696+04	.14548+05	.41055+04	.54746+00	.54746+00
8	.01	.25	2						.48695+04			
9	.01		1		.54309+04	.39060+04	.21600+03	.55800+03	.21600+03	.10846+03	.30988-01	.30988-01
10	.06		1		.13795+06	.39020+03	.97324+03	.82782+04	.48762+04		.31041+02	.35141+00
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --												
1 FLUE GAS					.17523+07	.75830+07	.71507+04	.78521+05	.32135+07	.10664+05	.65093+03	.64678+01
2 FLYASH COLLECTN									.59125+07			
	SECTOR 1 - UTILITY BOILERS				EQUIPMENT TYPE 102 - WALL FIRED BOILER							
2		.65	1		.98650+06	.20038+07	.13012+04	.33135+05	.98617+06	.25596+05	.18283+03	.60236+00
2		.65	2						.16829+07			
3		.65	1		.29390+06	.15408+07	.78684+03	.20017+05	.53551+06	.19669+05	.11015+03	.36387+00
3		.65	2						.99452+06			
4		.65	1		.16110+06	.48256+06	.43086+03	.10972+05	.28572+06	.73313+04	.60375+02	.19945+00
4		.65	2						.52697+06			
5		.65	1		.38830+04	.35592+04	.90200+02	.29810+03	.86290+04	.33140+02	.13206+01	.43792-02
5		.65	2						.16014+05			
6	.05	.25	1		.60083+05	.18894+06	.16856+03	.36068+04	.44835+04	.50614+04	.16871+00	.16871+00
6	.05	.25	2						.14945+04			
7	.05	.25	1		.15113+06	.23763+06	.42398+03	.65569+04	.11277+05	.63655+04	.42357+00	.42357+00
7	.05	.25	2						.37591+04			
8	.05	.25	1		.19527+06	.15352+06	.54782+03	.84721+04	.14571+05	.41129+04	.54832+00	.54832+00
8	.05	.25	2						.48571+04			
9	.05		1		.51406+05	.18336+05	.10140+04	.26195+04	.10140+04	.50915+03	.14547+00	.14547-02
10	.12		1		.66680+06	.73590+03	.21096+04	.28955+03	.10568+05		.67146+02	.76014+00
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --												
1 FLUE GAS					.20505+07	.46297+07	.68722+04	.11313+06	.17759+07	.68478+05	.42261+03	.38730+01
2 FLYASH COLLECTN									.32305+07			
	SECTOR 1 - UTILITY BOILERS				EQUIPMENT TYPE 103 - OPPOSED WALL BOILER							
2		.65	1		.13602+06	.56022+06	.36378+03	.36378+04	.25339+06	.71002+04	.50976+02	.16840+00
2		.65	2						.47049+06			
3		.65	1		.81995+05	.42983+06	.21930+03	.21930+04	.14940+06	.54875+04	.30730+02	.10152+00
3		.65	2						.27747+06			
4		.65	1		.45017+05	.13485+06	.12040+03	.12040+04	.79292+05	.20487+04	.16871+02	.55736-01
4		.65	2						.14726+06			

TABLE D-6. Continued

FUEL TYPE	CNTRL FAC 1	2	3	EFF STR	POLLUTANTS (MEGAGRAMS/YEAR) NOX	SOX	HC	CO	PART	SULFAT	POM HI	POM LO
5			.65	1	.74130+04	.67872+04	.17220+03	.56910+03	.16464+05	.63268+02	.25307+01	.83604-02
5			.65	2					.30576+05			
6	.05		.25	1	.24217+05	.76156+05	.67940+02	.98750+03	.18071+04	.20401+04	.68002-01	.68002-01
6	.05		.25	2					.60237+03			
7	.05		.25	1	.61002+05	.95910+05	.17114+03	.24875+04	.45521+04	.25694+04	.17130+00	.17130+00
7	.05		.25	2					.15174+04			
8	.05		.25	1	.79088+05	.62178+05	.22188+03	.32250+04	.59017+04	.16656+04	.22208+00	.22208+00
8	.05		.25	2					.19672+04			
9	.05			1	.45982+04	.16275+04	.90000+02	.22500+03	.90000+02	.45191+02	.12912-01	.12912-01
10	.07			1	.35215+06	.57740+03	.10819+04	.13461+05	.54094+03		.54935+02	.38983+00
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --												
1 FLUE GAS					.79150+06	.13679+07	.25085+04	.27989+05	.51140+06	.21020+05	.13602+03	.11981+01
2 FLYASH COLLECTN									.92988+06			
SECTOR 1 - UTILITY BOILERS EQUIPMENT TYPE 104 - CYCLONE BOILER												
2	.02		.75	1	.86856+05	.23602+06	.10191+04	.28598+04	.12975+05	.26521+04	.29037+00	.29037+00
2	.02		.75	2					.38420+05			
3	.02		.75	1	.71024+06	.24564+07	.83334+04	.23385+05	.10376+06	.27803+05	.23744+01	.23744+01
3	.02		.75	2					.31154+06			
5			.75	1	.91238+05	.44278+05	.11193+04	.37127+04	.76501+05	.41275+03	.25178+00	.25178+00
5			.75	2					.22950+06			
6	.04		.25	1	.25255+04	.11808+05	.72240+02	.18600+03	.27450+03	.30988+03	.10329-01	.10329-01
6	.04		.25	2					.91500+02			
7	.04		.25	1	.38929+04	.13776+05	.16856+03	.43400+03	.64050+03	.36153+03	.24102-01	.24102-01
7	.04		.25	2					.21350+03			
8	.04		.25	1	.77870+04	.91020+04	.22274+03	.57350+03	.84637+03	.23887+03	.31849-01	.31849-01
8	.04		.25	2					.28212+03			
10				1	.19781+05	.18380+01	.36722+03	.44930+03	.26230+03		.16697+01	.18903-01
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --												
1 FLUE GAS					.87924+06	.27713+07	.11303+05	.31596+05	.19528+06	.31778+05	.46526+01	.30017+01
2 FLYASH COLLECTN									.58035+06			
SECTOR 1 - UTILITY BOILERS EQUIPMENT TYPE 105 - VERTICAL + STOKER BOILER												
1			.50	1	.29321+05	.38259+05	.32809+03	.10028+05	.19781+05	.51604+03	.11963-01	.11963-01
1			.50	2					.19781+05			
2			.50	1	.29590+05	.16932+06	.61990+03	.39270+04	.11790+06	.18464+04	.12072-01	.12072-01
2			.50	2					.11790+06			
3			.50	1	.29590+05	.20913+06	.61990+03	.39270+04	.11553+06	.23672+04	.12072-01	.12072-01
3			.50	2					.11553+06			
5			.50	1	.29210+04	.29088+04	.73530+02	.48330+03	.10829+05	.27115+02	.98775-03	.98775-03
5			.50	2					.10829+05			
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --												
1 FLUE GAS					.90922+05	.41462+06	.16314+04	.18365+05	.26384+06	.47567+04	.37095-01	.37095-01
2 FLYASH COLLECTN									.26384+06			
By Fuel -- Sector 1 total												
1 ANTHRACITE					.29321+05	.38259+05	.32809+03	.10028+05	.39562+05	.51604+03	.11963-01	.11963-01
2 EASTERN BITUMIN.					.14606+07	.64396+07	.55556+04	.72348+05	.83080+07	.81039+05	.54993+03	.36029+01
3 CENTRAL BITUMIN.					.15513+07	.73059+07	.11316+05	.67263+05	.53826+07	.89414+05	.33415+03	.43790+01
4 WESTERN BITUMIN.					.44509+06	.14544+07	.12786+04	.21909+05	.25115+07	.22096+05	.18147+03	.10930+01
5 LIGNITE					.77940+05	.74659+05	.18898+04	.64995+04	.51806+06	.69594+03	.10496+02	.51660+00
6 HIGH S RES. OIL					.11639+06	.46585+06	.47730+03	.54659+04	.14731+05	.12473+05	.41576+00	.41576+00
7 MED S RES. OIL					.29224+06	.58446+06	.11868+04	.13710+05	.36966+05	.15649+05	.10433+01	.10433+01
8 LOW S RES. OIL					.37809+06	.37807+06	.15594+04	.17740+05	.47824+05	.10125+05	.13497+01	.13497+01
9 DISTILLATE OIL					.61835+05	.23870+05	.13200+04	.34025+04	.13200+04	.66280+03	.10937+00	.45355-01
10 NATURAL GAS					.11516+07	.14553+04	.45339+04	.50639+05	.16227+05		.13429+03	.15203+01
BY EFFLUENT STREAMS --												
1 FLUE GAS					.35644+07	.16767+08	.29445+05	.26960+06	.59600+07	.21267+06	.12137+04	.13778+02
2 FLYASH COLLECTN									.10917+08			

TABLE D-6. Continued

FUEL TYPE	CNTRL 1	FAC- 2	EFF 3	STR	NOX	SOX	HC	CO	PART	SULFAT	POM HI	POM LO
						POLLUTANTS (MEGAGRAMS/YEAR)						
	SECTOR		2 - PACKAGED BOILERS					EQUIPMENT TYPE 201 - WALL FIRED W-TUBE			>29.3	
9			1		.27370+05	.92225+04	.25500+03	.33150+03	.65790+03	.2560A+03	.10243+00	.10353+00
10			1		.27933+06	.27840+03	.36192+04	.83520+04	.15962+04		.25402+02	.28757+00
11			1		.39130+05	.39000+02	.50700+03	.11700+04	.22360+03		.35565+01	.40285-01
14		.50	1		.16922+06	.62720+06	.11220+04	.20400+02	.43636+06	.85605+04	.61460+00	.62118+00
14		.50	2						.43636+06			
15		.05	1		.20511+06	.25990+06	.19110+04	.24843+04	.23661+05	.82248+04	.76765+00	.77587+00
15		.05	2						.12453+04			
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --												
1 FLUE GAS					.71516+06	.89663+06	.74142+04	.12356+05	.46250+06	.17041+05	.30445+02	.18284+01
2 FLYASH COLLECTN									.43760+06			
	SECTOR		2 - PACKAGED BOILERS					EQUIPMENT TYPE 202 - STOKER W-TUBE			>29.3	
14		.50	1		.12535+06	.77566+06	.20038+04	.11650+05	.49946+06	.78219+04	.54754+00	.56759+00
14		.50	2						.49946+06			
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --												
1 FLUE GAS					.12535+06	.77566+06	.20038+04	.11650+05	.49946+06	.78219+04	.54754+00	.56759+00
2 FLYASH COLLECTN									.49946+06			
	SECTOR		2 - PACKAGED BOILERS					EQUIPMENT TYPE 203 - SINGLE BURNER W-T			<29.3	
9			1		.69525+04	.11175+03	.44290+02	.16480+03	.84460+03	.31031+03	.12913+00	.12058+00
10			1		.16719+06	.57460+04	.28730+04	.14534+05	.57460+04	.43642+05	.46260+02	.52370+00
11			1		.12857+05	.44200+03	.22100+03	.11100+04	.44200+03		.35565+01	.40285-01
15			1		.10798+06	.28679+06	.51170+03	.20230+04	.23264+05	.76825+04	.71793+00	.69695+00
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --												
1 FLUE GAS					.29643+06	.30915+06	.36300+04	.17840+05	.30297+05	.51635+05	.50660+02	.13811+01
	SECTOR		2 - PACKAGED BOILERS					EQUIPMENT TYPE 204 - SCOTCH FIRETUBE			<29.3	
9			1		.30185+05	.48391+05	.19178+03	.71360+03	.32558+04	.13437+04	.57011+04	.43892+01
10			1		.96131+05	.29160+02	.16524+04	.83592+04	.25272+04		.26606+05	.27067+00
11			1		.18791+04	.57000+00	.32300+02	.16340+03	.49400+02		.52009+03	.53878-02
15			1		.17308+06	.45549+06	.81270+03	.32130+04	.36949+05	.12202+05	.12040+05	.91919+01
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --												
1 FLUE GAS					.30199+06	.50391+06	.26892+04	.12449+05	.42782+05	.13545+05	.44907+05	.13807+02
	SECTOR		2 - PACKAGED BOILERS					EQUIPMENT TYPE 205 - FIREBOX FIRETUBE			<29.3	
9			1		.27202+05	.43725+05	.17329+03	.68480+03	.29419+04	.12141+04	.51514+04	.39199+01
10			1		.88911+05	.26970+03	.15283+04	.77318+04	.23374+04		.25034+00	.25034+00
11			1		.18791+04	.57000+01	.32300+02	.16340+03	.49400+02		.52908+02	.52908-02
15			1		.11206+06	.29354+06	.52374+03	.20706+04	.23812+05	.78633+04	.77846+04	.59237+01
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --												
1 FLUE GAS					.23005+06	.33754+06	.22576+04	.10610+05	.29141+05	.90774+04	.12936+05	.10099+02
	SECTOR		2 - PACKAGED BOILERS					EQUIPMENT TYPE 206 - STOKER FIRED W-TUBE			<29.3	
1		.15	1		.37590+04	.73710+04	.63000+02	.19320+04	.65849+04	.99421+02	.24674-01	.85140+00
1		.15	2						.11620+04			

TABLE D-6. Continued

FUEL TYPE	CNTRL 1	CNTRL 2	CNTRL 3	FAC STR	EFF	POLLUTANTS (MEGAGRAMS/YEAR) NOX	SOX	HC	CO	PART	SULFAT	POM HI	POM LO
10		.15	1			.27491+06	.22669+07	.27598+05	.32193+05	.27812+07			
10		.15	2							.49081+06	.25732+05	.18012+01	.62152+02
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --													
1 FLUE GAS						.27817+06	.22738+07	.27657+05	.34125+05	.27878+07			
2 FLYASH COLLECTN										.49197+06	.25831+05	.18259+01	.63004+02
SECTOR 2 - PACKAGED BOILERS									EQUIPMENT TYPE 208 - CAST IRON BOILERS				
9			1			.12217+05	.19638+05	.77830+02	.28960+03	.66970+03	.54551+03	.26954+01	.26954+01
10			1			.13622+05	.79200+02	.68040+03	.22704+04	.44880+03		.73514-01	.73514-01
15			1			.35880+05	.93990+05	.16770+03	.66300+03	.76295+04	.25178+04	.29039+01	.29039+01
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --													
1 FLUE GAS						.61720+05	.11371+06	.93193+03	.32230+04	.87830+04	.30631+04	.56727+01	.56727+01
SECTOR 2 - PACKAGED BOILERS									EQUIPMENT TYPE 209 - STOKER F-T BOILER <29.3				
1		.15	1			.75180+04	.14742+05	.12600+03	.38640+04	.13170+05	.19884+03	.18082+03	.17046+01
1		.15	2							.25241+04			
10		.15	1			.99524+05	.82199+06	.10008+05	.11676+05	.10087+07	.93326+04	.18641+04	.22566+02
10		.15	2							.17801+06			
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --													
1 FLUE GAS						.10704+06	.83673+06	.10134+05	.15540+05	.10219+07			
2 FLYASH COLLECTN										.18033+06	.95315+04	.20049+04	.24270+02
SECTOR 2 - PACKAGED BOILERS									EQUIPMENT TYPE 210 - HRT BOILERS <29.3				
9			1			.17752+05	.28667+05	.10520+03	.44710+03	.10257+04	.79235+03	.53618+04	.25582+01
10			1			.52911+05	.16050+05	.90950+03	.46010+04	.13910+04		.19645+02	.16579+00
15			1			.68265+05	.17854+06	.33300+03	.12580+04	.30710+05	.47774+04	.47296+04	.35989+01
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --													
1 FLUE GAS						.13493+06	.20717+06	.13977+04	.63061+04	.33127+05	.55697+04	.81061+04	.63229+01
SECTOR 2 - PACKAGED BOILERS									EQUIPMENT TYPE 211 - RES/COMM STEAM + HOT WAT				
1			1			.25102+04	.49190+04	.42980+04	.15320+04	.42980+04	.66280+02	.11147+02	.11147+02
9			1			.48400+05	.95980+05	.41624+04	.26840+05	.67760+04	.26512+04	.13105+02	.13105+02
10			1			.25353+05	.19162+03	.25058+04	.63382+04	.31691+04		.20523+00	.20523+00
14			1			.19723+04	.16432+05	.39402+04	.17737+05	.39402+04	.18464+03	.87585+01	.87585+01
15			1			.11178+05	.33189+05	.20769+03	.10681+04	.57270+04	.89091+03	.10275+03	.10275+01
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --													
1 FLUE GAS						.89413+05	.19021+06	.15114+05	.53916+05	.23910+05	.37930+04	.13597+03	.38243+02
SECTOR 2 TOTAL						.23443+07	.63995+07	.73200+05	.17802+06	.65490+07	.14691+06	.68180+05	.16120+03
BY FUEL --													
1 ANTHRACITE						.13787+05	.27027+05	.44870+04	.77240+04	.27539+05	.36454+03	.15199+03	.13703+02
9 DISTILLATE OIL						.17000+06	.25630+06	.50098+04	.29431+05	.16172+05	.71131+04	.14230+05	.26840+02
10 NATURAL GAS						.72340+06	.67540+04	.13775+05	.52146+05	.17216+05	.43642+05	.26693+05	.17768+01
11 PROCESS GAS						.95745+05	.48727+03	.79260+03	.26148+04	.76440+03		.52721+03	.91748-01
14 BIT/LIG COAL						.66548+06	.45077+07	.44668+05	.73277+05	.63343+07	.51632+05	.18759+04	.98465+02
15 RESIDUAL OIL						.71585+06	.16012+07	.44675+04	.12780+05	.15299+06	.44158+05	.24701+05	.24118+02
BY EFFLUENT STREAMS --													
1 FLUE GAS						.23443+07	.63995+07	.73200+05	.17802+06	.49397+07	.14691+06	.68180+05	.16120+03
2 FLYASH COLLECTN										.16094+07			

TABLE D-6. Continued

FUEL TYPE	CNTRL 1	FAC- 2	EFF 3	STR	POLLUTANTS (MEGAGRAMS/YEAR) NOx	SOx	HC	CO	PART	SULFAT	POM HI	POM LO
SECTOR 3 - WARM AIR FURNACES									EQUIPMENT TYPE 301 - WARM AIR CENTRAL FURNACE			
10				1	.10633+06	.11066+04	.10509+05	.37092+05	.13291+05		.10111+01	.10111+01
16				1	.85705+05	.15244+06	.66435+04	.43555+05	.10818+05	.42329+04	.10945+02	.10945+02
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --												
1 FLUE GAS					.19204+06	.15355+06	.17113+05	.80647+05	.24110+05	.42329+04	.11956+02	.11956+02
SECTOR 3 - WARM AIR FURNACES									EQUIPMENT TYPE 302 - WARM AIR SPACE HEATER			
10				1	.99414+05	.37436+03	.49334+04	.17412+05	.62393+04		.39718+02	.39843+02
16				1	.99347+05	.78679+05	.34169+04	.22537+05	.55974+04	.21903+04	.56634+01	.56634+01
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --												
1 FLUE GAS					.99261+05	.79254+05	.83503+04	.39949+05	.11837+05	.21903+04	.95382+02	.95506+02
SECTOR 3 - WARM AIR FURNACES									EQUIPMENT TYPE 303 - MISCELLANEOUS COMBUSTION			
10				1	.34400+05	.25800+03	.34000+04	.12000+05	.43000+04			
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --												
1 FLUE GAS					.34400+05	.25800+03	.34000+04	.12000+05	.43000+04			
SECTOR 3 TOTAL												
					.32070+06	.23306+06	.28863+05	.13260+06	.40247+05	.64232+04	.57338+02	.57463+02
BY FUEL --												
10 NATURAL GAS					.19069+06	.17389+04	.18843+05	.66504+05	.23831+05		.40729+02	.40854+02
16 OIL					.13005+06	.23134+06	.10020+05	.66092+05	.16416+05	.64232+04	.16608+02	.16608+02
BY EFFLUENT STREAMS --												
1 FLUE GAS					.32070+06	.23306+06	.28863+05	.13260+06	.40247+05	.64232+04	.57338+02	.57463+02
SECTOR 9 - GAS TURBINES									EQUIPMENT TYPE 901 - SIMPLE CYCLE >15			
9				1	.96360+05	.20248+04	.22704+04	.12408+05	.42240+04			
10				1	.91340+05	.96640+03	.18432+04	.10388+05	.12720+04			
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --												
1 FLUE GAS					.13770+06	.32912+04	.40936+04	.22796+05	.54960+04			
SECTOR 9 - GAS TURBINES									EQUIPMENT TYPE 902 -			
9				1	.21133+06	.61953+04	.57321+04	.27387+05	.89745+04			
10				1	.90792+05	.10296+04	.38376+04	.23119+05	.28080+04			
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --												
1 FLUE GAS					.30213+06	.72249+04	.95697+04	.50506+05	.11782+05			
SECTOR 9 - GAS TURBINES									EQUIPMENT TYPE 903 -			
9				1	.36500+03	.10700+02	.99000+01	.47300+02	.15500+02			
10				1	.19400+03	.22000+01	.82000+01	.49400+02	.60000+01			
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --												
1 FLUE GAS					.55900+03	.12900+02	.18100+02	.96700+02	.21500+02			
SECTOR 9 TOTAL												
					.44039+06	.10529+05	.13681+05	.73399+05	.17300+05			
BY FUEL --												
9 DISTILLATE OIL					.30806+06	.90308+04	.80124+04	.39842+05	.13214+05			
10 NATURAL GAS					.13233+06	.14982+04	.56690+04	.33557+05	.40860+04			
BY EFFLUENT STREAMS --												
1 FLUE GAS					.44039+06	.10529+05	.13681+05	.73399+05	.17300+05			

TABLE D-6. Concluded

FUEL TYPE	CNTRL 1	FAC 2	EFF 3	STR	NOX	SOX	HC	CO	POLLUTANTS (MEGAGRAMS/YEAR) PART	SULFAT	POM HI	POM LO
SECTOR 5 - RECIPROCATING I/C ENGINE								EQUIPMENT TYPE 501 - C. I. >75 kW				
9			1		.94014+05	.51786+04	.62100+04	.16902+05	.55620+04			
17			1		.71610+05		.29099+05	.95998+04				
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --												
1 FLUE GAS					.16562+06	.51786+04	.35389+05	.26502+05	.55620+04			
SECTOR 5 - RECIPROCATING I/C ENGINE								EQUIPMENT TYPE 502 - S. I. >75 kW				
10			1		.12618+07	.17886+03	.45121+06	.14390+06				
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --												
1 FLUE GAS					.12618+07	.17886+03	.45121+06	.14390+06				
SECTOR 5 - RECIPROCATING I/C ENGINE								EQUIPMENT TYPE 503 - C. I. 75kW-75kW/cyl				
9			1		.22459+06	.12371+05	.14835+05	.40377+05	.13287+05			
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --												
1 FLUE GAS					.22459+06	.12371+05	.14835+05	.40377+05	.13287+05			
SECTOR 5 - RECIPROCATING I/C ENGINE								EQUIPMENT TYPE 504 - S. I. 75kW-75kW/cyl				
10			1		.66736+05	.99600+01	.23865+05	.76110+04				
12			1		.10038+06	.13692+04	.34020+05	.10148+07	.16632+04			
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --												
1 FLUE GAS					.16712+06	.13787+04	.57885+05	.10224+07	.16632+04			
SECTOR 5 - RECIPROCATING I/C ENGINE								EQUIPMENT TYPE 506 - S. I. <75 kW				
12			1		.37926+05	.79870+03	.19845+05	.59197+06	.97020+03			
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --												
1 FLUE GAS					.37926+05	.79870+03	.19845+05	.59197+06	.97020+03			
SECTOR 5 TOTAL					.18570+07	.19906+05	.57909+06	.18252+07	.21482+05			
BY FUEL --												
9 DISTILLATE OIL					.31460+06	.17550+05	.21045+05	.57279+05	.18849+05			
10 NATURAL GAS					.13285+07	.18832+03	.47508+06	.15151+06				
12 GASOLINE					.13031+06	.21679+04	.53865+05	.16068+07	.26334+04			
17 DUAL (OIL + GAS)					.71610+05		.29099+05	.95998+04				
BY EFFLUENT STREAMS --												
1 FLUE GAS					.18570+07	.19906+05	.57909+06	.18252+07	.21482+05			

TABLE D-7. EMISSIONS INVENTORY -- POLLUTANT GROUP ii

FUEL TYPE	CNTRL 1	CNTRL 2	CNTRL 3	EFF STR	POLLUTANTS (MEGAGRAMS/YEAR) BA	BE	B	CR	CU	CU	PB	MN	HG	MO
SECTOR 1 - UTILITY BOILERS							EQUIPMENT TYPE 101 - TANGENTIAL BOILERS							
2		.65	1		.50821+03	.40431+02	.26766+04	.33316+03	.86058+02	.93736+03	.46303+03	.12536+04	.17894+02	.18747+03
2		.65	3		.16940+04	.80748+02	.53531+04	.33305+03	.51611+03	.13100+04	.19877+03	.25072+04	.99816+00	.29928+03
3		.65	1		.50678+03	.24406+02	.16157+04	.27111+03	.51949+02	.56584+03	.27951+03	.75673+03	.10772+02	.11317+03
3		.65	3		.10226+04	.48744+02	.32315+04	.32178+03	.31156+03	.79082+03	.11999+03	.15135+04	.59652+00	.18056+03
4		.65	1		.16830+03	.13390+02	.88641+03	.11053+03	.28503+02	.31043+03	.15334+03	.41515+03	.59094+01	.62046+02
4		.65	3		.56102+03	.26742+02	.17728+04	.17653+03	.17092+03	.43385+03	.65826+02	.83030+03	.32726+00	.99113+02
5		.65	1		.12934+03	.10721+01	.29198+02	.49956+01	.18340+01	.10721+02	.59764+01	.22146+02	.17975+00	.12090+01
5		.65	3		.43112+03	.21942+01	.58396+02	.79838+01	.10995+02	.15009+02	.12820+01	.44293+02	.99911-02	.19344+01
6	.01	.25	1		.27838+02		.36273+01	.36273+02	.14341+02	.29525+02	.32899+02	.29525+02	.43022+00	.29525+02
6	.01	.25	3		.92793+02		.72547+02	.57363+02	.84357+02	.41335+02	.14341+02	.59030+02	.24963-01	.47240+01
7	.01	.25	1		.69876+02		.91054+01	.91054+02	.35998+02	.74114+02	.82584+02	.74114+02	.10799+01	.74114+02
7	.01	.25	3		.23293+03		.18211+03	.14399+03	.21175+03	.10376+03	.35998+02	.14823+03	.61408-01	.11458+02
8	.01	.25	1		.90331+02		.11770+02	.11770+03	.46534+02	.95805+02	.10675+03	.95805+02	.13960+01	.95805+02
8	.01	.25	3		.30110+03		.23541+03	.18614+03	.27373+03	.13815+03	.46534+02	.19161+03	.79381-01	.15329+02
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --														
1 FLUE GAS					.13007+04	.79299+02	.52324+04	.89463+03	.26521+03	.20238+04	.11241+04	.26870+04	.57611+02	.56336+03
3 BOTTM HOPPER ASH					.43356+04	.15838+03	.10706+05	.14206+04	.15799+04	.28289+04	.48273+03	.52941+04	.20872+01	.61290+03
SECTOR 1 - UTILITY BOILERS							EQUIPMENT TYPE 102 - BALL FIRED BOILER							
2		.65	1		.29303+03	.23312+02	.15433+04	.19210+03	.49620+02	.54048+03	.26699+03	.72281+03	.10289+02	.10810+03
2		.65	3		.97677+03	.46560+02	.30866+04	.30754+03	.29759+03	.75537+03	.11461+03	.14456+04	.56979+00	.17256+03
3		.65	1		.17702+03	.14083+02	.93231+03	.11605+03	.29975+02	.32650+03	.16129+03	.43665+03	.62154+01	.65301+02
3		.65	3		.59007+03	.28127+02	.18646+04	.18567+03	.17977+03	.45632+03	.69235+02	.87330+03	.34421+00	.10425+03
4		.65	1		.97032+02	.77194+01	.51103+03	.63610+02	.16931+02	.17897+03	.88407+02	.23935+03	.34069+01	.35794+02
4		.65	3		.32344+03	.15417+02	.10221+04	.10178+03	.98541+02	.25013+03	.37950+02	.47869+03	.18867+00	.57181+02
5		.65	1		.26844+02	.22251+00	.60599+01	.10368+01	.38064+00	.22251+01	.12404+01	.45923+01	.37306-01	.25092+00
5		.65	3		.89478+02	.84503+00	.12120+02	.16570+01	.22819+01	.31152+01	.26607+00	.91846+01	.20736-02	.40147+00
6	.05	.25	1		.27838+02		.36273+01	.36273+02	.14341+02	.29525+02	.32899+02	.29525+02	.43022+00	.29525+02
6	.05	.25	3		.92793+02		.72547+02	.57363+02	.84357+02	.41335+02	.14341+02	.59030+02	.24963-01	.47240+01
7	.05	.25	1		.70020+02		.91239+01	.91239+02	.36071+02	.74264+02	.82751+02	.74264+02	.10821+01	.74264+02
7	.05	.25	3		.23340+03		.18248+03	.14428+03	.21218+03	.10397+03	.36071+02	.14855+03	.61533-01	.11482+02
8	.05	.25	1		.90473+02		.11789+02	.11789+03	.46607+02	.95956+02	.10692+03	.95956+02	.13982+01	.95956+02
8	.05	.25	3		.30158+03		.23578+03	.18643+03	.27416+03	.13834+03	.46607+02	.19191+03	.79506+01	.15353+02
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --														
1 FLUE GAS					.78226+03	.45337+02	.30172+04	.61819+03	.19343+03	.12479+04	.74049+03	.16031+04	.22859+02	.40919+03
3 BOTTM HOPPER ASH					.26075+04	.90548+02	.64762+04	.98454+03	.11489+04	.17496+04	.31908+03	.32063+04	.12702+01	.36631+03
SECTOR 1 - UTILITY BOILERS							EQUIPMENT TYPE 103 - OPPOSED WALL BOILER							
2		.65	1		.81925+02	.65176+01	.43147+03	.53706+02	.13873+02	.15111+03	.74643+02	.20208+03	.28765+01	.30221+02
2		.65	3		.27408+03	.13017+02	.86294+03	.85930+02	.83200+02	.21116+03	.32042+02	.40916+03	.15930+00	.48245+02
3		.65	1		.49387+02	.39290+01	.26011+03	.32376+02	.83629+01	.91092+02	.44997+02	.12182+03	.17340+01	.18218+02
3		.65	3		.16462+03	.78471+01	.52021+03	.51802+02	.50156+02	.12731+03	.19316+02	.24364+03	.96031-01	.29084+02
4		.65	1		.27115+02	.21571+01	.14280+03	.17775+02	.45914+01	.50012+02	.24705+02	.66883+02	.95203+00	.10002+02
4		.65	3		.90382+02	.43082+01	.28561+03	.28490+02	.27536+02	.69896+02	.10605+02	.13377+03	.52723-01	.13966+02
5		.65	1		.51247+02	.42480+00	.11569+02	.19794+01	.72667+00	.42480+01	.23680+01	.87671+01	.71221-01	.47903+00
5		.65	3		.17082+03	.88959+00	.23138+02	.31634+01	.43564+01	.59472+01	.50795+00	.17534+02	.39587-02	.76644+00
6	.05	.25	1		.11220+02		.14620+01	.14620+02	.57802+01	.11900+02	.13260+02	.11900+02	.17340+00	.11900+02
6	.05	.25	3		.37401+02		.29241+02	.23121+02	.34001+02	.16660+02	.57802+01	.23801+02	.98603-02	.19041+01

TABLE D-7. Continued

FUEL TYPE	CNTRL 1	CNTRL 2	CNTRL 3	EFF STR	BA	BE	POLLUTANTS (MEGAGRAMS/YEAR) H	CR	CO	CU	PH	MN	HG	RO
7	.05		.25	1	.28264+02		.36829+01	.36829+02	.14560+02	.29977+02	.33403+02	.29977+02	.43680+00	.29977+02
7	.05		.25	3	.94213+02		.73657+02	.58241+02	.85648+02	.41968+02	.14560+02	.59934+02	.24838-01	.47963+01
8	.05		.25	1	.36699+02		.47748+01	.47748+02	.18877+02	.38864+02	.43306+02	.38864+02	.56631+00	.38864+02
8	.05		.25	3	.12215+03		.95495+02	.75508+02	.11109+03	.54410+02	.18877+02	.77729+02	.32202-01	.62183+01
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --														
1 FLUE GAS					.28580+03	.13029+02	.85587+03	.20503+03	.66771+02	.37720+03	.23668+03	.48030+03	.68103+01	.13946+03
3 BOTTM HOPPER ASH					.95267+03	.26022+02	.18903+04	.32621+03	.39594+03	.52738+03	.10169+03	.96059+03	.37891+00	.10698+03
SECTOR 1 - UTILITY BOILERS							EQUIPMENT TYPE 104 - CYCLONE BOILER							
2	.02		.75	1	.30601+02	.24345+01	.16116+03	.20061+02	.51817+01	.56442+02	.27881+02	.75482+02	.14744+01	.11288+02
2	.02		.75	3	.10200+03	.48621+01	.32233+03	.32097+02	.31077+02	.78882+02	.11968+02	.15096+03	.59502-01	.18021+02
3	.02		.75	1	.25023+03	.19907+02	.13179+04	.16408+03	.42372+02	.46154+03	.22799+03	.61723+03	.87658+01	.92307+02
3	.02		.75	3	.83410+03	.39759+02	.26358+04	.26246+03	.25412+03	.64504+03	.97868+02	.12345+04	.48654+00	.14736+03
5			.75	1	.33832+03	.27713+01	.75478+02	.12913+02	.47407+01	.27713+02	.15448+02	.57195+02	.96463+00	.31251+01
5			.75	3	.11284+04	.55426+01	.15095+03	.20637+02	.28421+02	.38798+02	.33138+01	.11439+03	.25826-01	.50001+01
6	.04		.25	1	.17044+01		.22208+00	.22208+01	.87800+00	.18076+01	.20142+01	.18076+01	.26340-01	.18076+01
6	.04		.25	3	.56812+01		.44416+01	.35120+01	.51647+01	.25307+01	.87800+00	.36153+01	.14978-02	.28922+00
7	.04		.25	1	.39768+01		.51819+00	.51819+01	.20487+01	.42178+01	.46999+01	.42178+01	.61460-01	.42178+01
7	.04		.25	3	.13256+02		.10364+02	.81947+01	.12051+02	.59050+01	.20487+01	.84357+01	.34948-02	.67485+00
8	.04		.25	1	.92551+01		.68475+00	.68475+01	.27072+01	.55736+01	.62106+01	.55736+01	.81215-01	.55736+01
8	.04		.25	3	.17517+02		.13695+02	.10829+02	.15925+02	.78030+01	.27072+01	.11147+02	.46181-02	.89177+00
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --														
1 FLUE GAS					.62609+03	.25113+02	.15559+04	.21126+03	.57929+02	.55729+03	.28424+03	.76151+03	.10499+02	.11832+03
5 BOTTM HOPPER ASH					.20870+04	.50163+02	.31375+04	.33773+03	.34676+03	.77896+03	.11878+03	.15230+04	.58150+00	.17223+03
SECTOR 1 - UTILITY BOILERS							EQUIPMENT TYPE 105 - VERTICAL + STOKER BOILER							
1			.50	1	.29133+02	.25098+01	.82097+00	.10039+03	.30165+02	.62863+02	.10555+02	.15247+03	.90542+00	.83505+01
1			.50	3	.97109+02	.50197+01	.16748+01	.16091+03	.18108+03	.88196+02	.45177+01	.30634+03	.50197-01	.13417+02
2			.50	1	.21309+02	.16949+01	.11220+03	.13966+02	.36075+01	.39295+02	.19411+02	.52591+02	.74802+00	.78590+01
2			.50	3	.71015+02	.33850+01	.22441+03	.22346+02	.21636+02	.54918+02	.83324+01	.10510+03	.41425-01	.12546+02
3			.50	1	.21309+02	.16949+01	.11220+03	.13966+02	.36075+01	.39295+02	.19411+02	.52591+02	.74802+00	.78590+01
3			.50	3	.71015+02	.33850+01	.22441+03	.22346+02	.21636+02	.54918+02	.83324+01	.10510+03	.41425-01	.12546+02
5			.50	1	.21963+02	.18206+00	.99581+01	.84830+00	.31143+00	.18206+01	.10149+01	.37573+01	.30523-01	.20530+00
5			.50	3	.75210+02	.36411+00	.99162+01	.13557+01	.18670+01	.25486+01	.21769+00	.75146+01	.16966-02	.32848+00
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --														
1 FLUE GAS					.93705+02	.68817+01	.25919+03	.12917+03	.37691+02	.14327+03	.50392+02	.26133+03	.24320+01	.24274+02
3 BOTTM HOPPER ASH					.31235+03	.12159+02	.96048+03	.20696+03	.22622+03	.20058+03	.21400+02	.52906+03	.13474+00	.38837+02
SECTOR 1 TOTAL					.13384+05	.50613+03	.33762+05	.53406+04	.43183+04	.10430+05	.34796+04	.17261+05	.84658+02	.29521+04
BY FUEL --														
1 ANTHRACITE					.12624+03	.75295+01	.24958+01	.26130+03	.21125+03	.15106+03	.15073+02	.45881+03	.95561+00	.21768+02
2 EASTERN BITUMIN.					.40520+04	.22296+03	.14774+05	.15938+04	.11080+04	.41351+04	.12177+04	.69195+04	.34650+02	.89559+03
3 CENTRAL BITUMIN.					.39871+04	.19188+03	.12715+05	.13716+04	.95351+03	.35587+04	.10479+04	.59550+04	.29820+02	.77075+03
4 WESTERN BITUMIN.					.12673+04	.69733+02	.96207+04	.49847+03	.34652+03	.12933+04	.38084+03	.21641+04	.10837+02	.28010+03
5 LIGNITE					.29428+04	.19018+02	.38177+03	.56570+02	.55914+02	.11215+03	.31636+02	.28931+03	.82698+00	.13700+02
6 HIGH S RES. OIL					.29727+03		.18772+03	.23075+03	.24322+03	.17462+03	.11641+03	.21427+03	.11205+01	.84399+02
7 MED S RES. OIL					.74594+03		.47104+03	.57901+03	.61031+03	.43817+03	.29212+03	.53772+03	.28116+01	.21178+03
8 LOW S RES. OIL					.96504+03		.60939+03	.74909+03	.78958+03	.56688+03	.37792+03	.78860+03	.36375+01	.27399+03
BY EFFLUENT STREAMS --														
1 FLUE GAS					.30885+04	.16886+03	.10892+05	.20583+04	.62103+03	.43695+04	.24359+04	.57553+04	.80206+02	.12548+04
3 BOTTM HOPPER ASH					.10295+05	.33727+03	.22870+05	.32823+04	.36972+04	.60804+04	.10437+04	.11508+05	.44526+01	.12973+04

TABLE D-7. Continued

FUEL TYPE	CNTRL 1	CNTRL 2	CNTRL 3	STR	BA	BE	B	CR	CO	CU	PB	MN	HG	RO
						POLLUTANTS (MEGAGRAMS/YEAR)								
	SECTOR 2 - PACKAGED BOILERS							EQUIPMENT TYPE 201 - WALL FIRED W-TUBE				>29.3		
14		.50	1		.98775+02	.78581+01	.52021+03	.64752+02	.16726+02	.18218+03	.89995+02	.24364+03	.34681+01	.36437+04
14		.50	3		.32925+03	.15694+02	.10409+04	.10360+03	.10051+03	.25462+03	.38632+02	.48729+03	.19206+00	.58167+04
15		.85	1		.90473+02		.11789+03	.11789+03	.46607+02	.95956+02	.10692+03	.95956+02	.13982+01	.95956+04
15		.85	3		.30158+03		.23578+03	.18843+03	.27416+03	.13438+03	.46607+02	.19191+03	.79506-01	.15353+04
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --														
1 FLUE GAS					.18925+03	.78581+01	.53200+03	.18264+03	.63333+02	.27814+03	.19692+03	.33960+03	.48663+01	.13239+03
3 BOTTM HOPPER ASH					.63083+03	.15694+02	.12762+04	.29003+03	.57447+03	.38896+03	.85239+02	.67920+03	.27157+00	.73528+04
	SECTOR 2 - PACKAGED BOILERS							EQUIPMENT TYPE 202 - STOKER W-TUBE				>29.3		
14		.50	1		.90253+02	.71801+01	.47533+03	.59166+02	.15283+02	.16647+03	.82231+02	.22262+03	.31689+01	.33293+04
14		.50	3		.30084+03	.14340+02	.95067+03	.98666+02	.91657+02	.23265+03	.35299+02	.44525+03	.17599+00	.53149+04
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --														
1 FLUE GAS					.90253+02	.71801+01	.47533+03	.59166+02	.15283+02	.16647+03	.82231+02	.22262+03	.81689+01	.33293+04
3 BOTTM HOPPER ASH					.30084+03	.14340+02	.95067+03	.98666+02	.91657+02	.23265+03	.35299+02	.44525+03	.17599+00	.53149+04
	SECTOR 2 - PACKAGED BOILERS							EQUIPMENT TYPE 203 - SINGLE BURNER W-T				<29.3		
15			1		.89507+02		.11012+02	.11012+03	.43534+02	.89629+02	.99872+02	.89629+02	.13060+01	.89629+04
15			3		.28169+03		.22023+03	.17418+03	.25608+03	.12548+03	.43534+02	.17926+03	.79269-01	.14341+02
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --														
1 FLUE GAS					.89507+02		.11012+02	.11012+03	.43534+02	.89629+02	.99872+02	.89629+02	.13060+01	.89629+04
3 BOTTM HOPPER ASH					.28169+03		.22023+03	.17418+03	.25608+03	.12548+03	.43534+02	.17926+03	.79269-01	.14341+02
	SECTOR 2 - PACKAGED BOILERS							EQUIPMENT TYPE 204 - SCOTCH FIRETUBE				<29.3		
15			1		.13922+03		.17989+02	.17989+03	.69142+02	.14235+03	.15862+03	.14235+03	.20743+01	.14235+03
15			3		.44739+03		.34978+03	.27657+03	.90672+03	.19929+03	.69142+02	.28470+03	.11795+00	.22776+04
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --														
1 FLUE GAS					.13922+03		.17989+02	.17989+03	.69142+02	.14235+03	.15862+03	.14235+03	.20743+01	.14235+03
3 BOTTM HOPPER ASH					.44739+03		.34978+03	.27657+03	.90672+03	.19929+03	.69142+02	.28470+03	.11795+00	.22776+04
	SECTOR 2 - PACKAGED BOILERS							EQUIPMENT TYPE 205 - FIREBOX FIRETUBE				<29.3		
15			1		.86496+02		.11271+02	.11271+03	.44558+02	.91738+02	.10222+03	.91738+02	.13368+01	.91738+04
15			3		.28832+03		.22541+03	.17823+03	.26211+03	.12843+03	.44558+02	.18348+03	.76012-01	.14678+04
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --														
1 FLUE GAS					.86496+02		.11271+02	.11271+03	.44558+02	.91738+02	.10222+03	.91738+02	.13368+01	.91738+02
3 BOTTM HOPPER ASH					.28832+03		.22541+03	.17823+03	.26211+03	.12843+03	.44558+02	.18348+03	.76012-01	.14678+02
	SECTOR 2 - PACKAGED BOILERS							EQUIPMENT TYPE 206 - STOKER FIRED W-TUBE				<29.3		
1		.15	1		.56127+01	.48355+00	.15817+00	.19342+02	.58116+01	.12111+02	.20336+01	.29378+02	.17499+00	.16088+04
1		.15	3		.18709+02	.96709+00	.32266+00	.31001+02	.34888+02	.16992+02	.87038+00	.59820+02	.96709-04	.25849+04
14		.15	1		.29691+03	.23621+02	.15637+04	.19464+03	.50276+02	.59763+03	.27051+03	.73237+03	.10425+02	.10953+03
14		.15	3		.98969+03	.47175+02	.31274+04	.31142+03	.30152+03	.76536+03	.11612+03	.19647+04	.57732+00	.17484+03
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --														
1 FLUE GAS					.30252+03	.24108+02	.15639+04	.21398+03	.56088+02	.55974+03	.27255+03	.76179+03	.10599+02	.11113+03
3 BOTTM HOPPER ASH					.10084+04	.48142+02	.31277+04	.34242+03	.33691+03	.78235+03	.11699+03	.15238+04	.58699+00	.17783+03

TABLE D-7. Concluded

FUEL TYPE	CNTRL 1	CNTRL 2	CNTRL 3	FAC STR	EFF	POLLUTANTS (MEGAGRAMS/YEAR) BA	BE	B	CR	CU	CU	PB	MN	HG	MO
SECTOR 2 - PACKAGED BOILERS								EQUIPMENT TYPE 208 - CAST IRON BOILERS							
15			1	.27696+02				.36088+01	.36088+02	.14267+02	.29374+02	.32731+02	.29374+02	.42802+00	.29374+02
15			3	.92319+02				.72177+02	.57070+02	.83926+02	.41124+02	.14267+02	.58749+02	.24339-01	.46999+01
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --															
1 FLUE GAS				.27696+02				.36088+01	.36088+02	.14267+02	.29374+02	.32731+02	.29374+02	.42802+00	.29374+02
3 BOTTM HOPPER ASH				.92319+02				.72177+02	.57070+02	.83926+02	.41124+02	.14267+02	.58749+02	.24339-01	.46999+01
SECTOR 2 - PACKAGED BOILERS								EQUIPMENT TYPE 209 - STOKER F-T BOILER <29.3							
1	.15	1		.11225+02	.96709+00	.31634+00	.38684+02	.11623+02	.24222+02	.40672+01	.58749+02	.34888+00	.32176+01		
1	.15	3		.37418+02	.19342+01	.64933+00	.62002+02	.69775+02	.33984+02	.17408+01	.11804+03	.19342-01	.51699+01		
14	.15	1		.10768+03	.85669+01	.56714+03	.70593+02	.18235+02	.19862+03	.98112+02	.26562+03	.37809+01	.39723+02		
14	.15	3		.35895+03	.17110+02	.11343+04	.11295+03	.10936+03	.27759+03	.42116+02	.53124+03	.20939+00	.63414+02		
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --															
1 FLUE GAS				.11491+03	.95340+01	.36745+03	.10928+03	.29858+02	.22284+03	.10218+03	.32437+03	.91298+01	.42991+02		
3 BOTTM HOPPER ASH				.39437+03	.19044+02	.11349+04	.17495+03	.17913+03	.51157+03	.43857+02	.64928+03	.22873+00	.68584+02		
SECTOR 2 - PACKAGED BOILERS								EQUIPMENT TYPE 210 - HRT BOILERS <29.3							
15			1	.52551+02				.68475+01	.68475+02	.27072+02	.55736+02	.62106+02	.55736+02	.81215+00	.55736+02
15			3	.17517+03				.13695+03	.10829+03	.15925+03	.78030+02	.27072+02	.11147+03	.46181-01	.89177+01
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --															
1 FLUE GAS				.52551+02				.68475+01	.68475+02	.27072+02	.55736+02	.62106+02	.55736+02	.81215+00	.55736+02
3 BOTTM HOPPER ASH				.17517+03				.13695+03	.10829+03	.15925+03	.78030+02	.27072+02	.11147+03	.46181-01	.89177+01
SECTOR 2 - PACKAGED BOILERS								EQUIPMENT TYPE 211 - RLS/COMB STEAM & HOT WAT							
1			1	.37418+01	.32236+00	.10945+00	.12895+02	.38744+01	.80742+01	.13557+01	.19583+02	.11629+00	.10725+01		
1			3	.12473+02	.64473+00	.21911+00	.20967+02	.23258+02	.11328+02	.58025+00	.39346+02	.64473-02	.17233+01		
14			1	.21309+01	.16949+00	.11220+02	.13966+01	.36075+00	.39295+01	.19411+01	.52551+01	.74802-01	.78590+00		
14			3	.71015+01	.33850+00	.22441+02	.22346+01	.21636+01	.54918+01	.83329+00	.10510+02	.91425-02	.12546+01		
15			1	.98000+01		.12770+01	.12770+02	.50485+01	.10394+02	.11582+02	.10394+02	.15145+00	.10394+02		
15			3	.32667+02		.25539+02	.20194+02	.29697+02	.14552+02	.50485+01	.20788+02	.86121-02	.16630+01		
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --															
1 FLUE GAS				.15672+02	.49183+00	.12603+02	.27061+02	.92836+01	.22398+02	.14879+02	.35252+02	.34255+00	.12252+02		
3 BOTTM HOPPER ASH				.52291+02	.98323+00	.44195+02	.43096+02	.55119+02	.31371+02	.64620+01	.70695+02	.19202-01	.46409+01		
SECTOR 2 TOTAL															
				.67756+04	.14737+03	.10744+05	.28339+04	.25773+04	.39777+04	.16107+04	.62782+04	.30685+02	.11836+04		
BY FUEL --															
1 ANTHRACITE				.49180+02	.53194+01	.17631+01	.18459+03	.14923+03	.10671+03	.10648+02	.32411+03	.67507+00	.15377+02		
14 BIT/LIG COAL				.45816+04	.14203+03	.94128+04	.10154+04	.70590+03	.26345+04	.77580+03	.44085+04	.22076+02	.57059+03		
15 RESIDUAL OIL				.21049+04		.13292+04	.16339+04	.17222+04	.12364+04	.82429+03	.15455+04	.79338+01	.59761+03		
BY EFFLUENT STREAMS --															
1 FLUE GAS				.11021+04	.49168+02	.32015+04	.10944+04	.37242+03	.16584+04	.11243+04	.20924+04	.29864+02	.74884+03		
3 BOTTM HOPPER ASH				.36736+04	.98209+02	.75923+04	.17395+04	.22049+04	.23193+04	.48643+03	.41858+04	.16207+01	.99274+03		

TABLE D-8. EMISSIONS INVENTORY -- POLLUTANT GROUP iii

FUEL TYPE	CNTRL 1	CNTRL 2	CNTRL 3	FAC- EFF STR	POLLUTANTS (MEGAGRAMS/YEAR) NI	V	ZN	ZR	AS	BI	AL	SH	CO	SE
SECTOR 1 - UTILITY BOILERS								EQUIPMENT TYPE 101 - TANGENTIAL BOILERS						
2			.65	3	.52515+03	.93510+03	.73408+04	.67674+03	.35010+03	.23490+02	.23039+06	.31622+02	.95317+02	.13100+03
2			.65	3	.63018+03	.93510+03	.73408+04	.40769+04	.35010+03	.32977+02	.57597+06	.37946+02	.34435+02	.28121+02
3			.65	1	.31701+03	.56448+03	.44313+04	.40973+03	.21134+03	.19880+02	.13908+06	.19019+02	.57539+02	.79082+02
3			.65	3	.38091+03	.56448+03	.44313+04	.24611+04	.21134+03	.19907+02	.34769+06	.22906+02	.32860+02	.16975+02
4			.65	1	.17391+03	.30968+03	.24311+04	.22478+03	.11594+03	.77794+01	.76298+05	.10472+02	.31566+02	.43385+02
4			.65	3	.20870+03	.30968+03	.24311+04	.13502+04	.11594+03	.10921+02	.19075+06	.12567+02	.18027+02	.93129+01
5			.65	1	.31329+01	.13686+02	.91972+02	.22811+02	.57027+01	.11405+01	.42428+04	.28513+00	.17953+00	.25776+01
5			.65	3	.61589+01	.13686+02	.91972+02	.13686+03	.57027+01	.15968+01	.10607+05	.34216+00	.11405+00	.55430+00
6	.01	.25	1	.16871+04	.25307+04	.46396+02	.92793+01	.23620+00			.72547+03	.23620+00	.32899+00	.33743+02
6	.01	.25	3	.16871+04	.25307+04	.46396+02	.55676+02	.23620+00			.16871+04	.27838+00	.18559+01	.72547+01
7	.01	.25	1	.42351+04	.63526+04	.11646+03	.23293+02	.59291+00			.18211+04	.59291+00	.82584+00	.84701+02
7	.01	.25	3	.42351+04	.63526+04	.11646+03	.13976+03	.59291+00			.42351+04	.69878+00	.46586+01	.18211+02
8	.01	.25	1	.54746+04	.82119+04	.15055+03	.30110+02	.76644+00			.23541+04	.76644+00	.10675+01	.10949+03
8	.01	.25	3	.54746+04	.82119+04	.15055+03	.18066+03	.76644+00			.54746+04	.90331+00	.60220+01	.23541+02
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --														
1 FLUE GAS					.12918+05	.18918+05	.14559+05	.13987+04	.68468+03	.46591+02	.45490+06	.63063+02	.18684+03	.48398+03
3 BOTTM HOPPER ASH					.12622+05	.18918+05	.14559+05	.84012+04	.68468+03	.65402+02	.11364+07	.75642+02	.11797+03	.55534+03
SECTOR 1 - UTILITY BOILERS								EQUIPMENT TYPE 102 - WALL FIRED BOILER						
2			.65	1	.30280+03	.53918+03	.42327+04	.39136+03	.20187+03	.13545+02	.13284+06	.18233+02	.54960+02	.75537+02
2			.65	3	.36336+03	.53918+03	.42327+04	.23508+04	.20187+03	.19015+02	.33210+06	.21880+02	.31387+02	.16214+02
3			.65	1	.18292+03	.32572+03	.25570+04	.23642+03	.12195+03	.81823+01	.80249+05	.11015+02	.33201+02	.45632+02
3			.65	3	.21951+03	.32572+03	.25570+04	.14201+04	.12195+03	.11487+02	.20062+06	.13218+02	.18961+02	.97951+01
4			.65	1	.10027+03	.17854+03	.14016+04	.12959+03	.66844+02	.44850+01	.43988+05	.60375+01	.18199+02	.25013+02
4			.65	3	.12032+03	.17854+03	.14016+04	.77841+03	.66844+02	.62963+01	.10997+06	.72430+01	.10393+02	.53691+01
5			.65	1	.10652+01	.28906+01	.87111+01	.47343+01	.11836+01	.23672+00	.88058+03	.59179-01	.41425-01	.53498+00
5			.65	3	.12783+01	.28906+01	.87111+01	.28906+02	.11836+01	.33190+00	.22015+04	.71015-01	.23672-01	.11504+00
6	.05	.25	1	.16871+04	.25307+04	.46396+02	.92793+01	.23620+00			.72547+03	.23620+00	.32899+00	.33743+02
6	.05	.25	3	.16871+04	.25307+04	.46396+02	.55676+02	.23620+00			.16871+04	.27838+00	.18559+01	.72547+01
7	.05	.25	1	.42437+04	.63655+04	.11670+03	.23340+02	.59411+00			.18248+04	.59411+00	.82751+00	.84873+02
7	.05	.25	3	.42437+04	.63655+04	.11670+03	.14004+03	.59411+00			.42437+04	.70020+00	.46640+01	.18248+02
8	.05	.25	1	.54832+04	.82298+04	.15079+03	.30158+02	.76765+00			.23578+04	.76765+00	.10692+01	.10966+03
8	.05	.25	3	.54832+04	.82298+04	.15079+03	.18095+03	.76765+00			.54832+04	.90473+00	.60315+01	.23578+02
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --														
1 FLUE GAS					.12001+05	.18167+05	.85138+04	.82988+03	.39344+03	.26449+02	.26287+06	.36942+02	.10863+03	.37500+03
3 BOTTM HOPPER ASH					.12118+05	.18167+05	.85138+04	.49543+04	.39344+03	.37129+02	.65631+06	.44247+02	.73320+02	.11585+03
SECTOR 1 - UTILITY BOILERS								EQUIPMENT TYPE 103 - OPPOSED WALL BOILER						
2			.65	1	.88656+02	.15079+03	.11838+04	.10942+03	.56437+02	.37868+01	.37139+05	.50976+01	.15366+02	.21118+02
2			.65	3	.10159+03	.15079+03	.11838+04	.65722+03	.56437+02	.53160+01	.92688+05	.61171+01	.87751+01	.45332+01
3			.65	1	.51034+02	.90873+02	.71337+03	.65960+02	.34022+02	.22828+01	.22389+05	.30730+01	.92629+01	.12731+02
3			.65	3	.61240+02	.90873+02	.71337+03	.39620+03	.34022+02	.32047+01	.55972+05	.36876+01	.52899+01	.27368+01
4			.65	1	.28019+02	.49891+02	.39166+03	.36213+02	.18679+02	.12533+01	.12292+05	.16871+01	.50855+01	.69846+01
4			.65	3	.33622+02	.49891+02	.39166+03	.21752+03	.18679+02	.17594+01	.30730+05	.20246+01	.29043+01	.15003+01
5			.65	1	.20316+01	.54229+01	.16630+02	.90382+01	.22596+01	.45191+00	.16811+04	.11248+00	.79085-01	.10213+01
5			.65	3	.24405+01	.54229+01	.16630+02	.54229+02	.22596+01	.63268+00	.42028+04	.13537+00	.45191-01	.21963+00
6	.05	.25	1	.68002+03	.10200+04	.18701+02	.37401+01	.95203-01			.29241+03	.95203-01	.13260+00	.13600+02
6	.05	.25	3	.68002+03	.10200+04	.18701+02	.22441+02	.95203-01			.68002+03	.11220+00	.74802+00	.29241+01

TABLE D-8. Continued

FUEL TYPE	CNTRL 1	FAC- 2	EFF 3	STR	POLLUTANTS (MEGAGRAMS/YEAR) NI	V	ZN	ZR	AS	BI	AL	SN	CO	SE
7	.05	.25		1	.17130+04	.25694+04	.47106+02	.94213+01	.23981+00		.73657+03	.23981+00	.33403+00	.34259+04
7	.05	.25		3	.17130+04	.25694+04	.47106+02	.56528+02	.23981+00		.17130+04	.28284+00	.18843+01	.73657+04
8	.05	.25		1	.22208+04	.33312+04	.61073+02	.12215+02	.31092+00		.95495+03	.31092+00	.43306+00	.44416+04
8	.05	.25		3	.22208+04	.33312+04	.61073+02	.73287+02	.31092+00		.22208+04	.36684+00	.24429+01	.95495+04
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --														
1 FLUE GAS					.47795+04	.72176+04	.24319+04	.24600+03	.11204+03	.77748+01	.75485+05	.18617+02	.30693+02	.13414+05
3 BOTTM HOPPER ASH					.48127+04	.72176+04	.24319+04	.14774+04	.11204+03	.10913+02	.18837+06	.12726+02	.22090+02	.21992+03
SECTOR 1 - UTILITY BOILERS EQUIPMENT TYPE 104 - CYCLONE BOILER														
2	.02	.75		1	.51621+02	.56306+02	.44201+03	.40869+02	.21081+02	.14144+01	.13872+05	.19041+01	.57394+01	.78882+01
2	.02	.75		3	.37945+02	.56306+02	.44201+03	.24549+03	.21081+02	.19857+01	.34681+05	.22849+01	.32777+01	.16932+01
3	.02	.75		1	.25857+03	.46042+03	.36144+04	.33420+03	.17238+03	.11566+02	.11349+06	.15570+02	.46932+02	.64504+04
3	.02	.75		3	.31029+03	.46042+03	.36144+04	.20079+04	.17238+03	.16237+02	.28359+06	.18604+02	.26802+02	.13046+02
5		.75		1	.13267+02	.35378+02	.10849+03	.58964+02	.14741+02	.29482+01	.10967+05	.73705+00	.51593+00	.66629+01
5		.75		3	.15920+02	.35378+02	.10849+03	.35378+03	.14741+02	.41275+01	.27418+05	.88446+00	.29482+00	.14328+04
6	.04	.25		1	.10329+03	.15498+03	.28406+01	.56812+00	.14461-01		.44416+02	.14461-01	.20142-01	.20659+01
6	.04	.25		3	.10329+03	.15498+03	.28406+01	.34087+01	.14461-01		.10529+03	.17044-01	.11362+00	.44416+04
7	.04	.25		1	.24102+03	.36153+03	.66280+01	.13256+01	.33743-01		.10364+05	.33743-01	.46999-01	.48204+01
7	.04	.25		3	.24102+03	.36153+03	.66280+01	.79536+01	.33743-01		.24102+03	.39768-01	.26512+00	.10364+01
8	.04	.25		1	.31849+03	.47779+03	.87585+01	.17517+01	.44589-01		.13695+03	.44589-01	.62106-01	.63698+01
8	.04	.25		3	.31849+03	.47779+03	.87585+01	.10510+02	.44589-01		.31849+03	.52551-01	.35034+00	.13695+01
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --														
1 FLUE GAS					.96626+03	.15463+04	.41832+04	.43767+03	.20829+03	.15929+02	.13856+06	.18304+02	.53317+02	.92311+04
3 BOTTM HOPPER ASH					.10270+04	.15463+04	.41832+04	.26285+04	.20829+03	.22350+02	.34636+06	.21963+02	.31104+02	.14330+04
SECTOR 1 - UTILITY BOILERS EQUIPMENT TYPE 105 - VERTICAL + STOKER BOILER														
1		.50		1	.41846+02	.13089+02	.27679+02	.16091+02	.83505+01	.83505-01		.83505-01	.11728+00	.46913+04
1		.50		3	.50197+02	.13089+02	.27679+02	.96640+02	.83505+01	.11728+00		.10039+00	.67045-01	.10039+04
2		.50		1	.22015+02	.39200+02	.30773+03	.28453+02	.14676+02	.98474+00	.96580+04	.13256+01	.39958+01	.54918+01
2		.50		3	.26417+02	.39200+02	.30773+03	.17091+03	.14676+02	.13824+01	.24145+05	.15907+01	.22819+01	.11788+01
3		.50		1	.22015+02	.39200+02	.30773+03	.28453+02	.14676+02	.98474+00	.96580+04	.13256+01	.39958+01	.54918+01
3		.50		3	.26417+02	.39200+02	.30773+03	.17091+03	.14676+02	.13824+01	.24145+05	.15907+01	.22819+01	.11788+01
5		.50		1	.87154+00	.23241+01	.71273+01	.38735+01	.96838+00	.19368+00	.72048+03	.48419-01	.33893-01	.43771+04
5		.50		3	.10459+01	.23241+01	.71273+01	.23241+02	.96838+00	.27115+00	.16812+04	.58163-01	.19368-01	.94127+03
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --														
1 FLUE GAS					.86747+02	.93813+02	.65027+03	.76871+02	.38672+02	.22467+01	.20036+05	.27831+01	.81427+01	.11898+02
3 BOTTM HOPPER ASH					.10408+03	.93813+02	.65027+03	.46170+03	.38672+02	.31533+01	.50091+05	.33400+01	.46503+01	.94151+04
SECTOR 1 TOTAL					.60936+05	.91886+05	.60675+05	.20907+05	.28743+04	.23794+03	.33294+07	.28968+03	.63676+03	.24292+06
BY FUEL --														
1 ANTHRACITE					.92043+02	.26177+02	.59557+02	.11273+03	.16701+02	.20079+00		.18390+00	.18937+00	.56952+04
2 EASTERN BITUMIN.					.21257+04	.38411+04	.27013+05	.87502+04	.12883+04	.10390+03	.14836+07	.12040+03	.27553+03	.29278+05
3 CENTRAL BITUMIN.					.18299+04	.29614+04	.23248+05	.75304+04	.11087+04	.89818+02	.12768+07	.11016+03	.23713+03	.25197+05
4 WESTERN BITUMIN.					.66484+03	.10762+04	.84486+04	.27367+04	.40293+03	.32495+02	.46402+06	.40033+02	.86176+02	.91570+04
5 LIGNITE					.99213+02	.11930+03	.36547+03	.69594+03	.49710+02	.11930+02	.64723+05	.27541+01	.13670+01	.29160+04
6 HIGH S RES. OIL					.83152+04	.12473+05	.22867+03	.16007+03	.11681+01		.59453+04	.12681+01	.53891+01	.10103+03
7 MED S RES. OIL					.20865+05	.31298+05	.57380+03	.40166+03	.29212+01		.14919+05	.31820+01	.13510+02	.25351+03
8 LOW S RES. OIL					.26994+05	.40491+05	.74254+03	.51966+03	.37792+01		.19301+05	.41166+01	.17479+02	.32798+03
BY EFFLUENT STREAMS --														
1 FLUE GAS					.30252+05	.45963+05	.30338+05	.29842+04	.14371+04	.98989+02	.95185+06	.13171+03	.38762+03	.10975+04
3 BOTTM HOPPER ASH					.30684+05	.45963+05	.30338+05	.17923+05	.14371+04	.13895+03	.23775+07	.15797+03	.24914+03	.24183+04

TABLE D-8. Continued

FUEL TYPE	CNTRL 1	CNTRL 2	CNTRL 3	EFF STR	POLLUTANTS (MEGAGRAMS/YEAR) NI	V	ZN	ZR	AS	BI	AL	SB	CD	SE
SECTOR 2 - PACKAGED BOILERS					EQUIPMENT TYPE 201 - WALL FIRED W-TUBE >29.3									
14	.50	1			.10207+03	.18175+03	.14267+04	.13192+03	.68045+02	.45656+01	.44778+05	.61440+01	.18526+02	.25462+04
14	.50	3			.12248+03	.18175+03	.14267+04	.79239+03	.68045+02	.64099+01	.11194+06	.73752+01	.10580+02	.54655+04
15	.05	1			.54832+04	.82248+04	.15079+03	.30158+02	.76765+00		.23578+04	.76765+00	.10692+01	.10966+03
15	.05	3			.54832+04	.82248+04	.15079+03	.18095+03	.76765+00		.54832+04	.90473+00	.60315+01	.23578+04
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --														
1 FLUE GAS					.59853+04	.84065+04	.15775+04	.16208+03	.68813+02	.45656+01	.47136+05	.69136+01	.19595+02	.15513+03
3 BOTTM HOPPER ASH					.56057+04	.84065+04	.15775+04	.97338+03	.68813+02	.64099+01	.11743+06	.82799+01	.16611+02	.29843+04
SECTOR 2 - PACKAGED BOILERS					EQUIPMENT TYPE 202 - STOKER W-TUBE >29.3									
14	.50	1			.93262+02	.16607+03	.13037+04	.12054+03	.62174+02	.41717+01	.40915+05	.56138+01	.16927+02	.23265+04
14	.50	3			.11191+03	.16607+03	.13037+04	.72403+03	.62174+02	.58564+01	.10229+06	.67389+01	.96671+01	.49940+01
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --														
1 FLUE GAS					.93262+02	.16607+03	.13037+04	.12054+03	.62174+02	.41717+01	.40915+05	.56138+01	.16927+02	.23265+04
3 BOTTM HOPPER ASH					.11191+03	.16607+03	.13037+04	.72403+03	.62174+02	.58564+01	.10229+06	.67389+01	.96671+01	.49940+01
SECTOR 2 - PACKAGED BOILERS					EQUIPMENT TYPE 203 - SINGLE BURNER W-T <29.3									
15		1			.51217+04	.76825+04	.14085+03	.28169+02	.71703+00		.22023+04	.71703+00	.99872+00	.10243+03
15		3			.51217+04	.76825+04	.14085+03	.16901+03	.71703+00		.51217+04	.84507+00	.56338+01	.22023+04
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --														
1 FLUE GAS					.51217+04	.76825+04	.14085+03	.28169+02	.71703+00		.22023+04	.71703+00	.99872+00	.10243+03
3 BOTTM HOPPER ASH					.51217+04	.76825+04	.14085+03	.16901+03	.71703+00		.51217+04	.84507+00	.56338+01	.22023+04
SECTOR 2 - PACKAGED BOILERS					EQUIPMENT TYPE 204 - SCOTCH FIRETUBE <29.3									
15		1			.81344+04	.12202+05	.22370+03	.44739+02	.11388+01		.34978+04	.11388+01	.15862+01	.16269+03
15		3			.81344+04	.12202+05	.22370+03	.26844+03	.11388+01		.81344+04	.13422+01	.89478+01	.34978+04
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --														
1 FLUE GAS					.81344+04	.12202+05	.22370+03	.44739+02	.11388+01		.34978+04	.11388+01	.15862+01	.16269+03
3 BOTTM HOPPER ASH					.81344+04	.12202+05	.22370+03	.26844+03	.11388+01		.81344+04	.13422+01	.89478+01	.34978+04
SECTOR 2 - PACKAGED BOILERS					EQUIPMENT TYPE 205 - FIREBOX FIRETUBE <29.3									
15		1			.52422+04	.78633+04	.14916+03	.28832+02	.73390+00		.22541+04	.73390+00	.10222+01	.10484+03
15		3			.52422+04	.78633+04	.14916+03	.17299+03	.73390+00		.52422+04	.86496+00	.57664+01	.22541+04
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --														
1 FLUE GAS					.52422+04	.78633+04	.14916+03	.28832+02	.73390+00		.22541+04	.73390+00	.10222+01	.10484+03
3 BOTTM HOPPER ASH					.52422+04	.78633+04	.14916+03	.17299+03	.73390+00		.52422+04	.86496+00	.57664+01	.22541+04
SECTOR 2 - PACKAGED BOILERS					EQUIPMENT TYPE 206 - STOKER FIRED W-TUBE <29.3									
1	.15	1			.80621+01	.25217+01	.53326+01	.31001+01	.16088+01	.16088-01		.16088-01	.22596-01	.90382-01
1	.15	3			.96709+01	.25217+01	.53326+01	.18619+02	.16088+01	.22596-01		.19342-01	.12925-01	.19342-01
14	.15	1			.30680+03	.54631+03	.42886+04	.39653+03	.20454+03	.13724+02	.13460+06	.18474+02	.55686+02	.76536+04
14	.15	3			.36816+03	.54631+03	.42886+04	.23818+04	.20454+03	.19266+02	.33649+06	.22169+02	.31802+02	.16429+02
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --														
1 FLUE GAS					.31486+03	.54883+03	.42940+04	.39963+03	.20614+03	.13740+02	.13460+06	.18490+02	.55709+02	.76626+02
3 BOTTM HOPPER ASH					.37783+03	.54883+03	.42940+04	.24005+04	.20614+03	.19288+02	.33649+06	.22188+02	.31815+02	.16498+04

TABLE D-8. Concluded

FUEL TYPE	CNTRL 1	CNTRL 2	CNTRL 3	FAC STR	EFF	NI	V	ZN	ZR	AS	BI	AL	SB	CO	SE
						POLLUTANTS (MEGAGRAMS/YEAR)									
			SECTOR	2 - PACKAGED BOILERS					EQUIPMENT TYPE 208 - CAST IRON BOILERS						
15			1			.16785+04	.25178+04	.46160+02	.92319+01	.23499+00		.72177+03	.23499+00	.32731+00	.33571+02
15			3			.16785+04	.25178+04	.46160+02	.55391+02	.23499+00		.16785+04	.27696+00	.18464+01	.72177+01
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --															
1 FLUE GAS						.16785+04	.25178+04	.46160+02	.92319+01	.23499+00		.72177+03	.23499+00	.32731+00	.33571+02
3 BOTTM HOPPER ASH						.16785+04	.25178+04	.46160+02	.55391+02	.23499+00		.16785+04	.27696+00	.18464+01	.72177+01
			SECTOR	2 - PACKAGED BOILERS					EQUIPMENT TYPE 209 - STOKER F-T BOILER <29.3						
1		.15	1			.16124+02	.50433+01	.10665+02	.62002+01	.32176+01	.32176-01		.32176-01	.45191-01	.18076+00
1		.15	3			.19342+02	.50435+01	.10665+02	.37238+02	.32176+01	.45191-01		.38684-01	.25849-01	.38684-01
14		.15	1			.11127+03	.19814+03	.15554+04	.14342+03	.74182+02	.49774+01	.48817+05	.67003+01	.20197+02	.27759+02
14		.15	3			.13353+03	.19814+03	.15554+04	.86387+03	.74182+02	.69675+01	.12209+06	.80404+01	.11534+02	.59585+01
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --															
1 FLUE GAS						.12740+03	.20318+03	.15661+04	.15002+03	.77400+02	.50096+01	.48817+05	.67325+01	.20242+02	.27939+02
3 BOTTM HOPPER ASH						.15287+03	.20318+03	.15661+04	.90110+03	.77400+02	.70327+01	.12209+06	.80791+01	.11560+02	.59972+02
			SECTOR	2 - PACKAGED BOILERS					EQUIPMENT TYPE 210 - HRT BOILERS <29.3						
15			1			.31849+04	.47774+04	.87585+02	.17517+02	.44589+00		.13695+04	.44589+00	.62106+00	.63698+02
15			3			.31849+04	.47774+04	.87585+02	.10510+03	.44589+00		.31849+04	.52551+00	.35034+01	.13695+02
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --															
1 FLUE GAS						.31849+04	.47774+04	.87585+02	.17517+02	.44589+00		.13695+04	.44589+00	.62106+00	.63698+02
3 BOTTM HOPPER ASH						.31849+04	.47774+04	.87585+02	.10510+03	.44589+00		.31849+04	.52551+00	.35034+01	.13695+02
			SECTOR	2 - PACKAGED BOILERS					EQUIPMENT TYPE 211 - RES/COMM STEAM & HOT WAT						
1			1			.53747+01	.16811+01	.35550+01	.20667+01	.10725+01	.10725-01		.10725-01	.15064-01	.60255-01
1			3			.64473+01	.16811+01	.35550+01	.12413+02	.10725+01	.15064-01		.12895-01	.86164-02	.12895-01
14			1			.22015+01	.39200+01	.30773+02	.28453+01	.14676+01	.98474-01	.96580+03	.13256+00	.39958+00	.54918+00
14			3			.26417+01	.39200+01	.30773+02	.17091+02	.14676+01	.13824+00	.24145+04	.15907+00	.22819+00	.11788+00
15			1			.59394+03	.89091+03	.16333+02	.32667+01	.83152-01		.25539+03	.83152-01	.11582+00	.11879+02
15			3			.59394+03	.89091+03	.16333+02	.19600+02	.83152-01		.59394+03	.98000-01	.65334+00	.25539+01
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --															
1 FLUE GAS						.60152+03	.89651+03	.50661+02	.81787+01	.26233+01	.10920+00	.12212+04	.22644+00	.53046+00	.12488+02
3 BOTTM HOPPER ASH						.60303+03	.89651+03	.50661+02	.49103+02	.26233+01	.15331+00	.30084+04	.26997+00	.89015+00	.26847+01
SECTOR 2 TOTAL						.60297+05	.90527+05	.18869+05	.67879+04	.84085+03	.66336+02	.98735+06	.90660+02	.21380+03	.90230+03
BY FUEL --															
1 ANTHRACITE						.65021+02	.18492+02	.39105+02	.79636+02	.11798+02	.14184+00		.12991+00	.13024+00	.40232+00
14 BIT/LIG COAL						.13543+04	.21924+04	.17211+05	.55749+04	.82081+03	.66194+02	.94525+06	.81551+02	.17555+03	.18654+03
15 RESIDUAL OIL						.58878+05	.88316+05	.16191+04	.11334+04	.82429+01		.42097+05	.89788+01	.38123+02	.71536+03
BY EFFLUENT STREAMS --															
1 FLUE GAS						.30084+05	.45264+05	.94344+04	.96894+03	.42042+03	.27596+02	.28273+06	.41249+02	.11756+03	.74268+03
3 BOTTM HOPPER ASH						.30213+05	.45264+05	.94344+04	.58190+04	.42042+03	.38740+02	.70462+06	.49811+02	.96241+02	.15962+03

TABLE D-9. EMISSIONS INVENTORY -- POLLUTANT GROUP iv

FUEL TYPE	CNTRL 1	CNTRL 2	FAC 3	EFF STR	POLLUTANTS (MEGAGRAMS/YEAR) P	SR	
				SECTOR 1 - UTILITY BOILERS			EQUIPMENT TYPE 101 - TANGENTIAL BOILERS
6	.01	.25	1			.11810+01	
6	.01	.25	3		.22776+01	.72547+02	
7	.01	.25	1			.29695+01	
7	.01	.25	3		.57173+01	.18211+03	
8	.01	.25	1			.38322+01	
8	.01	.25	3		.73907+01	.23541+03	
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --							
1 FLUE GAS						.79777+01	
3 BOTTM HOPPER ASH					.15386+02	.49006+03	
				SECTOR 1 - UTILITY BOILERS			EQUIPMENT TYPE 102 - WALL FIRED BOILER
6	.05	.25	1			.11810+01	
6	.05	.25	3		.22776+01	.72547+02	
7	.05	.25	1			.29706+01	
7	.05	.25	3		.57289+01	.18248+03	
8	.05	.25	1			.38382+01	
8	.05	.25	3		.74023+01	.23578+03	
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --							
1 FLUE GAS						.79898+01	
3 BOTTM HOPPER ASH					.15409+02	.49068+03	
				SECTOR 1 - UTILITY BOILERS			EQUIPMENT TYPE 103 - OPPOSED WALL BOILER
6	.05	.25	1			.47601+00	
6	.05	.25	3		.91803+00	.29241+02	
7	.05	.25	1			.11991+01	
7	.05	.25	3		.23125+01	.73657+02	
8	.05	.25	1			.15546+01	
8	.05	.25	3		.29961+01	.95495+02	
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --							
1 FLUE GAS						.32297+01	
3 BOTTM HOPPER ASH					.62286+01	.19839+03	
				SECTOR 1 - UTILITY BOILERS			EQUIPMENT TYPE 104 - CYCLONE BOILER
6	.04	.25	1			.72306-01	
6	.04	.25	3		.13945+00	.44416+01	
7	.04	.25	1			.16871+00	
7	.04	.25	3		.32538+00	.10369+02	
8	.04	.25	1			.22294+00	
8	.04	.25	3		.42996+00	.13695+02	
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --							
1 FLUE GAS						.46396+00	
3 BOTTM HOPPER ASH					.89478+00	.28501+02	
				SECTOR 1 - UTILITY BOILERS			EQUIPMENT TYPE 105 - VERTICAL + STOKER BOILER
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --							
SECTOR 1 TOTAL							
					.37918+02	.12274+04	
BY FUEL --							
6 HIGH S RES. OIL					.56127+01	.18169+03	
7 MED S RES. OIL					.14084+02	.45591+03	
8 LOW S RES. OIL					.18221+02	.58962+03	
BY EFFLUENT STREAMS --							
1 FLUE GAS						.19661+02	
3 BOTTM HOPPER ASH					.37918+02	.12278+04	

TABLE D-9. Continued

FUEL TYPE	CNTRL 1	CNTRL 2	CNTRL 3	FAC STR	EFF P	EFF SR	POLLUTANTS (MEGAGRAMS/YEAR)
SECTOR 2 - PACKAGED BOILERS							
15		.05	1			.38382+01	
15		.05	3		.74023+01	.23578+03	
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --							
1 FLUE GAS						.38382+01	
3 BOTTM HOPPER ASH					.74023+01	.23578+03	
SECTOR 2 - PACKAGED BOILERS							
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --							
SECTOR 2 - PACKAGED BOILERS							
15			1			.35852+01	
15			3		.69142+01	.22025+03	
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --							
1 FLUE GAS						.35852+01	
3 BOTTM HOPPER ASH					.69142+01	.22025+03	
SECTOR 2 - PACKAGED BOILERS							
15			1			.56941+01	
15			3		.10981+02	.34978+03	
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --							
1 FLUE GAS						.56941+01	
3 BOTTM HOPPER ASH					.10981+02	.34978+03	
SECTOR 2 - PACKAGED BOILERS							
15			1			.36695+01	
15			3		.70769+01	.22541+03	
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --							
1 FLUE GAS						.36695+01	
3 BOTTM HOPPER ASH					.70769+01	.22541+03	
SECTOR 2 - PACKAGED BOILERS							
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --							
SECTOR 2 - PACKAGED BOILERS							
15			1			.11750+01	
15			3		.22660+01	.72177+02	
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --							
1 FLUE GAS						.11750+01	
3 BOTTM HOPPER ASH					.22660+01	.72177+02	
SECTOR 2 - PACKAGED BOILERS							
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --							

EQUIPMENT TYPE 201 - WALL FIRED W-TUBE >29

EQUIPMENT TYPE 202 - STOKER W-TUBE >29

EQUIPMENT TYPE 203 - SINGLE BURNER W-T <29

EQUIPMENT TYPE 204 - SCOTCH FIRETUBE <29

EQUIPMENT TYPE 205 - FIREBOX FIRETUBE <29

EQUIPMENT TYPE 206 - STOKER FIRED W-TUBE <29

EQUIPMENT TYPE 208 - CAST IRON BOILERS

EQUIPMENT TYPE 209 - STOKER F-T BOILER <29

TABLE D-9. Concluded

FUEL TYPE	CNTRL 1	CNTRL 2	CNTRL 3	EFF STR	POLLUTANTS (MEGAGRAMS/YEAR) P	SR
					EQUIPMENT TYPE 210 - HWT BOILERS <29.3	
		SECTOR	2 - PACKAGED BOILERS			
15			1			.22294+01
15			3		.42996+01	.13695+03
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --						
1 FLUE GAS						.22294+01
3 BOTTM HOPPER ASH					.42996+01	.13695+03
					EQUIPMENT TYPE 211 - RES/COMM STEAM & HOT WAT	
		SECTOR	2 - PACKAGED BOILERS			
15			1			.41576+00
15			3		.80182+00	.25539+02
EQUIPMENT TYPE EFFLUENT STREAM TOTAL --						
1 FLUE GAS						.41576+00
3 BOTTM HOPPER ASH					.80182+00	.25539+02
SECTOR 2 TOTAL					.39742+02	.12865+04
BY FUEL --						
15 RESIDUAL OIL					.39742+02	.12865+04
BY EFFLUENT STREAMS --						
1 FLUE GAS						.20607+02
3 BOTTM HOPPER ASH					.39742+02	.12659+04

APPENDIX E
REGIONAL STATIONARY SOURCE COMBUSTION CONTROLS

This appendix presents state and local standards for new and existing stationary combustion sources. This information was obtained through contacts with local regulatory agencies and from the Environmental Reporter (Reference E-1). Standards for new sources which are the same as the Federal NSPS (Table 4-9) are not listed. Table 4-12 of Section 4.4.2 shows the impact of these controls. In 1974, controls of stationary NO_x sources caused only an estimated 1.6 percent reduction in NO_x.

TABLE E-1. REGIONAL STATIONARY SOURCE COMBUSTION CONTROLS

REGION	STATE	EQUIPMENT[a]			STANDARD[b]			EFFECTIVE DATE	COMMENTS
		NEW OR EXISTING	TYPE	HEAT INPUT CAPACITY[c]	GAS FIRED	OIL FIRED	COAL FIRED		
NEW ENGLAND	CONNECTICUT	Existing	Fuel burning	>73 (250)	86.1 (0.2)	129 (0.3)	387.3 (0.9)		Except GT, IC
		New	Fuel burning	1.5-73 (5-250)	86.1 (0.2)	129 (0.3)	301 (0.7)		Except GT, IC
		Existing	Fuel burning	"	86.1 (0.2)	129 (0.3)	387.3 (0.9)		Except GT, IC; variances permitted
		All	GT		387.3 (0.9)	387.3 (0.9)	387.3 (0.9)		
	VERMONT	New	Combustion	≥73 (250)	–	129 (0.3)	–	7/1/71	Except GT
		New	GT	>73 (250)	–	129 (0.3)	–	7/1/73	
MIDDLE ATLANTIC	NEW YORK	All	GT, ICT	≥73 (250)	86.1 (0.2)	129 (0.3)			
	New York City	All	Boilers	>147.5 (500)	73.2 (0.17)	77.5 (0.18)	86.1 (0.2)		
SOUTH ATLANTIC	DELAWARE New Castle Co.	All	Steam generators	>147 (500)	86.1 (0.2)	129 (0.3)	129 (0.3)	7/1/76	Except for certain sources governed by operation permit
	DISTRICT OF COLUMBIA	Existing	Steam generators	>29 (100)	86.1 (0.2)	129 (0.3)	301 (0.7)		Except lignite
	FLORIDA Tampa	Existing	Steam boilers	>2.9 (10)	86.1 (0.2)	129 (0.3)	301. (0.7)	7/1/76	
	MARYLAND	New	Fuel burning	≥73 (250)	86.1 (0.2)	129 (0.3)	215.2 (0.5)		Applies to Priority I AQCR's only
	NORTH CAROLINA	Existing	Boilers	>73 (250)	258.2 (0.6)	258.2 (0.6)	559.4 (1.3)	7/1/72	

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[a] GT refers to gas turbines; IC refers to reciprocating internal combustion engines

[b] Unless stated otherwise, units are ng/J (lb/MBtu)

[c] Unless stated otherwise, units are MW (MBtu/hr)

TABLE E-1. Continued

REGION	STATE	EQUIPMENT[a]			STANDARD[b]			EFFECTIVE DATE	COMMENTS
		NEW OR EXISTING	TYPE	HEAT INPUT CAPACITY[c]	GAS FIRED	OIL FIRED	COAL FIRED		
WEST-SOUTH-CENTRAL	OKLAHOMA	New	Fuel burning	≥52.75 (50)	86.1 (0.2)	129 (0.3)	301 (0.7)		
	TEXAS								
	Dallas Forth Worth & Houston-Galveston ACQR'S	All	Steam generators	>272,200 kg/hr max (>600,000 lbs/hr max) continuous capacity				8/31/72	
			Opposed fired		301 (0.7)	–	–		
			Front fired		215.2 (0.5)	–	–		
			Tangential fired		107.6 (0.25)	–	–		
EAST-NORTH-CENTRAL	ILLINOIS Lake, Will, Du Page, McHenry, Kara, Grundy, Kendall, Kankakee, Macon, St. Clair, Madison Cos.	Existing	Fuel combustion	≥73 (250)	129 (0.3)	129 (0.3)	387.3 (0.9)		Except cyclone & horizonatally opposed fired boilers burning solid fuel
	Cook Co.	New	Fuel combustion	≥59 (200)	86.1 (0.2)	129 (0.3)	301 (0.7)		
		Existing	Fuel combustion	≥59 (200)	129 (0.3)	129 (0.3)	387.3 (0.9)		" "
	INDIANA	Existing	Fuel burning	≥73 (250)	86.1 (0.2)	129 (0.3)	301 (0.7)		Applies to "Priority Basin A" only - none at present
	OHIO	Existing	Boilers	≥73 (250)	86.1 (0.2)	129 (0.3)	387.3 (0.9)		Applies only to Priority I regions

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[a] GT refers to gas turbines; IC refers to reciprocating internal combustion engines

[b] Unless stated otherwise, units are ng/J (lb/MBtu)

[c] Unless stated otherwise, units are MW (MBtu/hr)

TABLE E-1. Continued

REGION	STATE	EQUIPMENT[a]			STANDARD[b]			EFFECTIVE DATE	COMMENTS
		NEW OR EXISTING	TYPE	HEAT INPUT CAPACITY[c]	GAS FIRED	OIL FIRED	COAL FIRED		
WEST-NORTH-CENTRAL	MINNESOTA	Existing	Boilers	>73 (250)	129 (0.3)	172.1 (0.4)			
	SOUTH DAKOTA	All	Fuel burning		86.1 (0.2)	129 (0.3)			
MOUNTAIN	NEW MEXICO	New	Coal burning	≥73 (250)			193.6 (0.45)		
		Existing	Coal burning	≥73 (250)			301 (0.7)	12/31/74	
		New	Gas burning	>1,055,000 GJ/yr (1,000,000 MBtu/yr)	86.1 (0.2)		301 (0.7)	12/31/74	
		Existing	Gas burning		129 (0.3)			12/31/74	
		All	Oil burning	"		129 (0.3)			
	WYOMING	New	Gas burning		86.1 (0.2)	–			Except IC <59 (200)
		Existing	Gas burning		99 (0.23)				
		New	Oil burning	≥0.29 (1)	–	129 (0.3)	–		Except IC <59 (200)
		New	Oil burning	<0.29 (1)	–	258.2 (0.6)	–		Except IC <59 (200)
		Existing	Oil burning	≥73 (250)	–	197.9 (0.45)	–		Except IC <59 (200)
		Existing	Oil burning	<73 (250)	–	258.2 (0.6)	–		Except IC <59 (200)
		New	Solid fired equip.		–	–	301 (0.7)		Except IC <59 (200)
		Existing	Solid fired equip.		–	–	322.7 (0.75)		Except IC <59 (200) except lignite

[a] GT refers to gas turbines; IC refers to reciprocating internal combustion engines

[b] Unless stated otherwise, units are ng/J (lb/MBtu)

[c] Unless stated otherwise, units are MW (MBtu/hr)

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TABLE E-1. Continued

REGION	STATE	EQUIPMENT[a]			STANDARD[b]			EFFECTIVE DATE	COMMENTS
		NEW OR EXISTING	TYPE	HEAT INPUT CAPACITY[c]	GAS FIRED	OIL FIRED	COAL FIRED		
PACIFIC	CALIFORNIA[d]								
	Bay Area APCD	New	Heat transfer	>73 (250)	125 ppm	225 ppm	–		
		All	Heat transfer	≥513 (1,750)	175 ppm	300 ppm	–	4/19/75	
	Monterey Bay	New	Fuel burning		64 kg/hr[f]	64 kg/hr[f]	64 kg/hr[f]		
		All	Fuel burning	>440 (1,500)	225 ppm	225 ppm/hr	–	9/16/76	
	San Diego	All	Fuel burning	≥15 (50)	125 ppm	225 ppm	225 ppm		
	San Joaquin	New	Fuel burning		64 kg/hr[f]	64 kg/hr[f]	64 kg/hr[f]		
		New	Fuel burning	>520 (1,775)	125 ppm	225 ppm	225 ppm	1/1/75	
	Kern Co.	New	Fuel burning		64 kg/hr[f]	64 kg/hr[f]	64 kg/hr[f]		
	Santa Barbara APCD	New	Fuel burning		64 kg/hr[f]	64 kg/hr[f]	64 kg/hr[f]		
		Any	Fuel burning	>520 (1,775)	125 ppm	225 ppm	–	1/1/75	
	Cos. in SCAPCD:								
	LA Co.[e]	All	Equip.	>520 (1,775)	225 ppm	325 ppm	–	12/31/71	
		All	Equip.	>520 (1,775)	125 ppm	225 ppm	–	12/31/74	
		New	Equip.	>73 (250)	125 ppm	225 ppm	–		
	Orange Co.[e]	Existing	Equip.	147-630 (500-2,150)	225 ppm	325 ppm	–	12/31/72	
		Existing	Equip.	>630 (2,150)	225 ppm	325 ppm	–	12/31/72	
		Existing	Equip.	>630 (2,150)	225 ppm	325 ppm	–	12/31/72	
		Existing	Equip.		125 ppm	225 ppm	–	12/31/75	

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[a] GT refers to gas turbines; IC refers to reciprocating internal combustion engines

[b] Unless stated otherwise, units are ng/J (lb/MBtu)

[c] Unless stated otherwise, units are MW (MBtu/hr)

[d] All ppm standards are at 3 percent O_2

[e] Rules put into effect before SCAPCD was formed and replaced by SCAPCD rules

[f] 140 lbs/hr

TABLE E-1. Concluded

REGION	STATE	EQUIPMENT[a]			STANDARD[b]			EFFECTIVE DATE	COMMENTS
		NEW OR EXISTING	TYPE	HEAT INPUT CAPACITY[c]	GAS FIRED	OIL FIRED	COAL FIRED		
PACIFIC (Continued)	San Bernardino Co.[e]	Existing	Equip.	>520 (1,775)	125 ppm	225 ppm	–	1/1/75	
		Existing	Steam. generators	147-520 (500-1,775)	125 ppm	225 ppm	–	1/1/75	
	Riverside Co.[e]	Existing	Equip.	>205 (700)	225 ppm	325 ppm		12/31/71	Applies to West Central Area Only
		Existing	Equip.	>205 (700)	125 ppm	225 ppm		12/31/74	Applies to West Central Area Only
		Existing	Equip.	>520 (1,775)	125 ppm	225 ppm		1/1/75	Applies to Balance of County
		New	Equip.		64 kg/hr[f]	64 kg/hr[f]	64 kg/hr[f]		
	SCAPCD	All	Fuel burning	523-628 (1,786-2,143)	225 ppm	325 ppm	325 ppm		
		All	Fuel burning	>628 (2,143)	125 ppm	225 ppm	225 ppm		
		All	Steam generating	>163 (555)	125 ppm	225 ppm	225 ppm		
		All	Fuel burning	161-523 (550-1,786)	300 ppm	400 ppm	400 ppm	1/1/77	
	Ventura Co. APCD	New	Fuel burning		64 kg/hr[f]	64 kg/hr[f]	64 kg/hr[f]		
		New	Fuel burning	>73 (250)	125 ppm	225 ppm			
		All	Fuel burning	73-630 (250-2,150)	250 ppm	250 ppm	250 ppm		Except Peaking Units at Mandalay
		All	Fuel burning	>630 (2,150)	125 ppm	225 ppm	–		

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[a] GT refers to gas turbines; IC refers to reciprocating internal combustion engines

[b] Unless stated otherwise, units are ng/J (lb/MBtu)

[c] Unless stated otherwise, units are MW (MBtu/hr)

[d] All ppm standards are at 3 percent O_2

[e] Rules put into effect before SCAPCD was formed and replaced by SCAPCD rules

[f] 140 lbs/hr

REFERENCES FOR APPENDIX E

E-1. Environment Reporter, State Air Laws (2V.) Bureau of National Affairs, Inc., Washington, D.C.

APPENDIX F

NATIONAL SOURCE POLLUTION POTENTIAL ASSESSMENT FOR 1974

Appendix F presents the national source pollution potential assessment for 1974. This assessment was generated using the Source Analysis Model (SAM) developed in Section 5.1. The data used in this assessment is discussed in Section 5.2. This assessment is based on the reference high nuclear energy projection scenario described in Section 3.4.1.

This assessment for 1974 suggests that coal-fired utilities and stokers are the most serious sources of pollution potential at present. Beryllium is the most deleterious pollutant, having a single pollutant impact factor two order of magnitude larger than other pollutants. Cyclone boilers represent the most significant single NO_x source. Finally, opposed wall coal-fired boilers have the highest single source pollution potential. For a complete discussion of the results summarized here and the conclusions of the source analysis modeling for 1974, refer to Sections 5.3 and 5.4 respectively.

It should be noted here that this assessment is based on incomplete data in some areas. The health effect values are preliminary, denoting ambient concentrations at which continuous exposure should be investigated rather than indicating absolute standards. Also, POM and trace element data are highly variable depending on combustion conditions and fuel composition.

Thus, the assessment listing presented here should be considered as an indicator of possibly serious pollution sources, rather than as an absolute ranking of pollution severity.

TABLE F-1. NATIONAL POLLUTION POTENTIAL ASSESSMENT FOR STATIONARY COMBUSTION SOURCES IN 1974

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 559.7

SECTOR 1 - UTILITY BOILERS

EQUIP TYPE 101 - TANGENTIAL BOILERS

FUEL TYPE 2 - EASTERN BITUMIN.

CONSUMPTION: TOTAL = 2.624 (1E15 KJ/YR)
SINGLE SOURCE = .1124-01 (1E15 KJ/YR)

FRACTION: RURAL = .590
URBAN = .410

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .6500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 180.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.9824+09	.3224+10	.5216+10
SOX	.1448+11	.2434+11	.3617+11
HC	.1529-01*	.1800+03*	.1840+03*
CO	.1991-02*	.2502+01*	.4002+01*
PART	.7322+10	.4097+11	.4728+11
SULFAT	.3651-01*	.1677+00*	.2482+00*
POM HI	.5308+00*	.4531+01*	.7031+01*
BA	.2844+00*	.8677+00*	.1368+01*
BE	.1336+13	.1336+13	.1872+13
B	.2429+00*	.2429+00*	.2429+00*
CR	.3491+10	.5828+10	.1036+11
CO	.5778+00*	.5778+00*	.7478+00*
CU	.4766+08	.3339+09	.2918+09
PB	.8637+00*	.6141+01*	.4309+02*
MN	.7074-01*	.7914-01*	.1279+00*
TOTAL	.13677+13	.14192+13	.19831+13

POLLUTANT	NATURAL	RURAL	URBAN
HG	.5991+00*	.5991+00*	.2099+01*
MO	.1058-01*	.1058-01*	.1058-01*
NI	.7497+08	.1121+09	.5206+09
V	.5276+00*	.5562+00*	.7966+00*
ZN	.4142+00*	.1927+01*	.2767+01*
ZR	.3830-01*	.3830-01*	.3830-01*
AS	.1975+00*	.1975+00*	.2480+00*
BI	.2161-01*	.2161-01*	.2161-01*
AL	.5449+10	.8595+10	.9029+10
SB	.1769-01*	.6769-01*	.1177+00*
CD	.8899+08	.1029+09	.2114+10
SE	.1848+00*	.1848+00*	.2688+00*
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.3171+08	.4366+10
URBAN	.7133+09	.6826+11

TOTAL IMPACT FACTOR = .7262+11
AVERAGE SOURCE IMPACT FACTOR = .3112+09

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF REG

TABLE F-1. Continued

1979 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 101 - TANGENTIAL BOILERS FUEL TYPE 3 - CENTRAL BITUMIN.

CONSUMPTION: TOTAL = 1.584 (1E15 KJ/YR)
SINGLE SOURCE = .1124-01 (1E15 KJ/YR)

FRACTION: RURAL = .590
URBAN = .410

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .6500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 180.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.9824+09	.3229+10	.5216+10
SOX	.1843+11	.2829+11	.4012+11
HC	.1529-01*	.1800+03*	.1640+03*
CO	.1991-02*	.2502+01*	.4002+01*
PART	.6982+10	.3875+11	.4470+11
SULFAT	.4681-01*	.1780+00*	.2585+00*
PGM HI	.5308+00*	.4531+01*	.7031+01*
BA	.2844+00*	.8677+00*	.1368+01*
BE	.1336+13	.1336+13	.1872+13
B	.2929+00*	.2929+00*	.2929+00*
CR	.3491+10	.5828+10	.1036+11
CO	.5778+00*	.5778+00*	.7478+00*
CU	.4766+08	.3339+09	.2918+09
PB	.8637+00*	.6141+01*	.4309+02*
MN	.7074-01*	.7914-01*	.1279+00*
TOTAL	.13713+13	.14209+13	.19845+13

POLLUTANT	NATURAL	RURAL	URBAN
HG	.5991+00*	.5991+00*	.2099+01*
MO	.1058-01*	.1058-01*	.1058-01*
NI	.7497+08	.1121+09	.5206+09
V	.5276+00*	.5562+00*	.7966+00*
ZN	.4142+00*	.1927+01*	.2767+01*
ZR	.3830-01*	.3830-01*	.3830-01*
AS	.1975+00*	.1975+00*	.2980+00*
BI	.2161-01*	.2161-01*	.2161-01*
AL	.5449+10	.8545+10	.9029+10
SB	.1769-01*	.6769-01*	.1177+00*
CD	.8899+08	.1029+09	.2114+10
SE	.1848+00*	.1848+00*	.2688+00*
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.3174+08	.2638+10
URBAN	.7138+09	.4123+11

TOTAL IMPACT FACTOR = .4387+11
AVERAGE SOURCE IMPACT FACTOR = .3114+09

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 859.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 101 - TANGENTIAL BOILERS FUEL TYPE 4 - WESTERN BITURIN.

CONSUMPTION: TOTAL = .8690 (1E15 KJ/YR) SINGLE SOURCE = .1124-01 (1E15 KJ/YR)

FRACTION: RURAL = .590 URBAN = .410

CONTROLS: NOX = .0000 SOX = .0000 PARTICULATES = .6500

GAUSSIAN APPROXIMATED SOURCE EFFECTIVE STACK HEIGHT = 180.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.9824+09	.3229+10	.5216+10
SOX	.1053+11	.2039+11	.3222+11
HC	.1529-01*	.1800+03*	.1840+03*
CO	.1991-02*	.2502+01*	.4002+01*
PART	.6578+10	.3656+11	.4219+11
SULFAT	.3183-01*	.1631+00*	.2436+00*
POM HI	.5308+00*	.4531+01*	.7031+01*
BA	.2844+00*	.8677+00*	.1368+01*
BE	.1336+13	.1336+13	.1872+13
B	.2429+00*	.2429+00*	.2429+00*
CR	.3491+10	.5828+10	.1036+11
CO	.5778+00*	.5778+00*	.7478+00*
CU	.4766+08	.3339+09	.2918+09
PB	.8637+00*	.6141+01*	.4309+02*
MN	.7074-01*	.7914-01*	.1279+00*
TOTAL	.13630+13	.14109+13	.19741+13

POLLUTANT	NATURAL	RURAL	URBAN
HG	.5991+00*	.5991+00*	.2099+01*
MO	.1058-01*	.1058-01*	.1058-01*
NI	.7497+08	.1121+09	.5206+09
V	.5276+00*	.5562+00*	.7966+00*
ZN	.4142+00*	.1927+01*	.2767+01*
ZR	.3830-01*	.3830-01*	.3830-01*
AS	.1975+00*	.1975+00*	.2480+00*
BI	.2161-01*	.2161-01*	.2161-01*
AL	.5449+10	.8545+10	.9029+10
SB	.1769-01*	.6769-01*	.1177+00*
CD	.8699+08	.1029+09	.2114+10
SE	.1848+00*	.1848+00*	.2688+00*
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.3152+08	.1437+10
URBAN	.7101+09	.2250+11

TOTAL IMPACT FACTOR = .2394+11

AVERAGE SOURCE IMPACT FACTOR = .3097+09

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF REG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 559.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 101 - TANGENTIAL BOILERS FUEL TYPE 5 - LIGNITE

CONSUMPTION: TOTAL = .5300-01 (1E15 KJ/YR)
SINGLE SOURCE = .1124-01 (1E15 KJ/YR)

FRACTION: RURAL = .700
URBAN = .300

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .6500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 180.6 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.6222+09	.2820+10	.4596+10
SOX	.2064+10	.5177+10	.8914+10
HC	.1458+00*	.1A01+03*	.1841+03*
CO	.4817-02*	.2505+01*	.4005+01*
PART	.9143+10	.4279+11	.4910+11
SULFAT	.6553-02*	.1378+00*	.2163+00*
POM HI	.5308+00*	.4531+01*	.7031+01*
BA	.5556+09	.1005+10	.8956+09
BE	.1754+13	.1754+13	.2290+13
B	.1312+00*	.1312+00*	.1312+00*
CR	.2075+10	.3548+10	.6407+10
CO	.6097+00*	.6097+00*	.7797+00*
CU	.7425+00*	.7826+01*	.6784+01*
PB	.5519+00*	.5830+01*	.4277+02*
MN	.6181-01*	.7022-01*	.1190+00*
TOTAL	.17728+13	.18179+13	.23673+13

POLLUTANT	NATURAL	RURAL	URBAN
HG	.2988+00*	.2988+00*	.1799+01*
MO	.3377-02*	.3377-02*	.3377-02*
NI	.7292+00*	.8745+00*	.1277+09
V	.3824+00*	.4109+00*	.6513+00*
ZN	.1173+00*	.1630+01*	.2470+01*
ZR	.6373-01*	.6373-01*	.6373-01*
AS	.1593+00*	.1593+00*	.2097+00*
BI	.5194-01*	.5194-01*	.5194-01*
AL	.4473+10	.8012+10	.7315+10
SB	.7899-02*	.5790-01*	.1079+00*
CD	.1659+00*	.2909+00*	.1938+08
SE	.1800+00*	.1800+00*	.2641+00*
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.4061+08	.1340+09
URBAN	.8515+09	.1209+10

TOTAL IMPACT FACTOR = .1338+10
AVERAGE SOURCE IMPACT FACTOR = .2839+09

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 359.7

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 101 - TANGENTIAL BOILERS FUEL TYPE 6 - HIGH S RES. OIL

CONSUMPTION: TOTAL = .1960 (1E15 KJ/YR) SINGLE SOURCE = .7142-02 (1E15 KJ/YR)

FRACTION: RURAL = .320 URBAN = .680

CONTROLS: NOX = .0140 SOX = .0000 PARTICULATES = .2500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 110.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN	POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2547+09	.8187+09	.1320+10	HG	.4051+00*	.4051+00*	.1905+01*
SOX	.7767+10	.1655+11	.2710+11	MO	.4672-01*	.4672-01*	.4672-01*
HC	.3202-01*	.1800+03*	.1840+03*	NI	.2457+11	.2502+11	.2659+11
CO	.3202-02*	.2503+01*	.4003+01*	V	.6630+10	.6701+10	.8095+10
PART	.5093+07	.5538+08	.6481+08	ZN	.7342-01*	.1586+01*	.2426+01*
SULFAT	.1177+00*	.2489+00*	.3294+00*	ZR	.1468-01*	.1468-01*	.1468-01*
POM HI	.7943-02*	.4008+01*	.6508+01*	AS	.3738-02*	.3738-02*	.5416-01*
BA	.4369+00*	.1171+07	.1520+01*	BI	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *	AL	.4027+07	.1348+09	.9559+07
B	.9231-02*	.9231-02*	.9231-02*	SB	.3707-02*	.5371-01*	.1037+00*
CR	.4105+10	.6443+10	.1098+11	CD	.1549+00*	.2299+00*	.1164+07
CO	.6370+08	.6370+08	.8818+08	SE	.1076+08	.1076+08	.1444+05
CU	.5194+07	.3859+08	.3368+08	P	.0000 *	.0000 *	.0000 *
PB	.2308+08	.1134+09	.7455+09	SR	.4044-02*	.4044-02*	.4044-02*
MN	.4672-01*	.5513-01*	.1039+00*				
TOTAL	.43435+11	.55959+11	.75041+11				

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.1250+07	.1098+08
URBAN	.2699+08	.5037+09

TOTAL IMPACT FACTOR = .5147+09
AVERAGE SOURCE IMPACT FACTOR = .1876+08

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF MEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 101 - TANGENTIAL BOILERS FUEL TYPE 7 - MED S RES. OIL

CONSUMPTION: TOTAL = .4929 (1E15 KJ/YR)
SINGLE SOURCE = .7142-02 (1E15 KJ/YR)

FRACTION: RURAL = .320
URBAN = .680

CONTROLS: NOX = .0140
SOX = .0000
PARTICULATES = .2500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 110.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2547+09	.8187+09	.1320+10
SOX	.2578+10	.5696+10	.9437+10
HC	.3202-01*	.1800+03*	.1840+03*
CO	.3202-02*	.2503+01*	.4003+01*
PART	.5093+07	.5538+08	.6481+08
SULFAT	.5884-01*	.1901+00*	.2706+00*
POM HI	.7943-02*	.4008+01*	.6508+01*
BA	.4369+00*	.1171+07	.1520+01*
BE	.0000 *	.0000 *	.0000 *
B	.9231-02*	.9231-02*	.9231-02*
CR	.4105+10	.6493+10	.1098+11
CO	.6370+08	.6370+08	.8818+08
CU	.5194+07	.3859+08	.3368+08
PB	.2308+08	.1134+09	.7455+09
MN	.4672-01*	.5513-01*	.1039+00*
TOTAL	.38247+11	.45100+11	.57377+11

POLLUTANT	NATURAL	RURAL	URBAN
HG	.4051+00*	.4051+00*	.1905+01*
MO	.4672-01*	.4672-01*	.4672-01*
NI	.2457+11	.2502+11	.2659+11
V	.6630+10	.6701+10	.8095+10
ZN	.7342-01*	.1586+01*	.2426+01*
ZR	.1468-01*	.1468-01*	.1468-01*
AS	.3738-02*	.3738-02*	.5416-01*
BI	.0000 *	.0000 *	.0000 *
AL	.4027+07	.1348+09	.9559+07
SB	.3707-02*	.5371-01*	.1037+00*
CD	.1549+00*	.2299+00*	.1164+07
SE	.1076+08	.1076+08	.1444+08
P	.0000 *	.0000 *	.0000 *
SR	.4044-02*	.4044-02*	.4044-02*

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.1008+07	.2221+08
URBAN	.2064+08	.9668+09

TOTAL IMPACT FACTOR = .9890+09
AVERAGE SOURCE IMPACT FACTOR = .1436+08

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 559.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 101 - TANGENTIAL BOILERS FUEL TYPE 8 - LOW S RES. OIL

CONSUMPTION: TOTAL = .6360 (1E15 KJ/YR) SINGLE SOURCE = .7142-02 (1E15 KJ/YR)

FRACTION: RURAL = .320 URBAN = .680

CONTROLS: NOX = .0140 SOX = .0000 PARTICULATES = .2500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 110.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN	POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2547+09	.8187+09	.1320+10	HG	.4051+00*	.4051+00*	.1905+01*
SOX	.8308+09	.1936+10	.3262+10	MO	.4672-01*	.4672-01*	.4672-01*
HC	.3202-01*	.1800+03*	.1840+03*	NI	.2457+11	.2502+11	.2659+11
CO	.5202-02*	.2503+01*	.4003+01*	V	.6630+10	.6701+10	.8095+10
PART	.5093+07	.5538+08	.6481+08	ZN	.7342-01*	.1586+01*	.2426+01*
SULFAT	.2942-01*	.1607+00*	.2411+00*	ZR	.1468-01*	.1468-01*	.1468-01*
POM HI	.7943-02*	.4008+01*	.6508+01*	AS	.3738-02*	.3738-02*	.5416-01*
BA	.4369+00*	.1171+07	.1520+01*	BI	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *	AL	.4027+07	.1348+09	.9559+07
B	.9231-02*	.9231-02*	.9231-02*	SB	.3707-02*	.5371-01*	.1037+00*
CR	.4105+10	.6443+10	.1098+11	CD	.1549+00*	.2299+00*	.1164+07
CO	.6370+08	.6370+08	.8818+08	SE	.1076+08	.1076+08	.1444+08
CU	.5194+07	.3859+08	.3368+08	P	.0000 *	.0000 *	.0000 *
PB	.2308+08	.1134+09	.7455+09	SR	.4044-02*	.4044-02*	.4044-02*
MN	.4672-01*	.5513-01*	.1039+00*				
TOTAL	.36499+11	.41341+11	.51203+11				

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.9236+06	.2632+08
URBAN	.1842+08	.1115+10

TOTAL IMPACT FACTOR = .1142+10
AVERAGE SOURCE IMPACT FACTOR = .1282+08

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1979 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 659.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 101 - TANGENTIAL BOILERS FUEL TYPE 9 - DISTILLATE OIL

CONSUMPTION: TOTAL = .3600-01 (1E15 KJ/YR)
SINGLE SOURCE = .7142-02 (1E15 KJ/YR)

FRACTION: RURAL = .580
URBAN = .420

CONTROLS: NOX = .0140
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 110.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2547+09	.8187+09	.1320+10
SOX	.2157+09	.5642+09	.9824+09
HC	.2234+00*	.1802+03*	.1842+03*
CO	.5772-02*	.2506+01*	.4006+01*
PART	.2979+00*	.1096+02*	.1296+02*
SULFAT	.1373-01*	.1450+00*	.2255+00*
POM HI	.7983-02*	.4008+01*	.6508+01*
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.47033+09	.13829+10	.23026+10

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.3089+05	.9032+05
URBAN	.8283+06	.1753+07

TOTAL IMPACT FACTOR = .1844+07
AVERAGE SOURCE IMPACT FACTOR = .3658+06

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 859.7

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 101 - TANGENTIAL BOILERS FUEL TYPE 10 - NATURAL GAS

CONSUMPTION: TOTAL = 1.134 (1E15 KJ/YR) FRACTION: RURAL = .590
SINGLE SOURCE = .8766-02 (1E15 KJ/YR) URBAN = .410

CONTROLS: NOX = .0570
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 60.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.3790+09	.1013+10	.1577+10
SOX	.6837-01*	.3193+01*	.6943+01*
HC	.1568+00*	.1802+03*	.1842+03*
CO	.1331-01*	.2513+01*	.4013+01*
PART	.3134+06	.5821+07	.6816+07
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.1529+07	.6883+07	.1023+08
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.38102+09	.10257+10	.15936+10

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.2291+05	.1749+07
URBAN	.5732+06	.3040+08

TOTAL IMPACT FACTOR = .3215+08
AVERAGE SOURCE IMPACT FACTOR = .2486+06

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1979 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 859.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 102 - WALL FIRED BOILER FUEL TYPE 2 - EASTERN BITUMIN.

CONSUMPTION: TOTAL = 1.513 (1E15 KJ/YR) FRACTION: RURAL = .590
SINGLE SOURCE = .4740-02 (1E15 KJ/YR) URBAN = .410

CONTROLS: NOX = .0014
SOX = .0000
PARTICULATES = .6500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 180.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN	POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2925+09	.9934+09	.1566+10	HG	.2526+00*	.2526+00*	.1753+01*
SOX	.5507+10	.1334+11	.2273+11	MO	.4460-02*	.4460-02*	.4460-02*
HC	.6445-02*	.1800+03*	.1840+03*	NI	.6354+00*	.7807+00*	.1088+09
CO	.1641-02*	.2502+01*	.4002+01*	V	.2225+00*	.2510+00*	.4914+00*
PART	.1444+10	.8961+10	.1037+11	ZN	.1746+00*	.1687+01*	.2528+01*
SULFAT	.1539-01*	.1466+00*	.2271+00*	ZR	.1615-01*	.1615-01*	.1615-01*
POM HI	.2238+00*	.4229+01*	.6724+01*	AS	.8329-01*	.8329-01*	.1337+00*
BA	.1199+00*	.7832+00*	.1203+01*	BI	.9110-02*	.9110-02*	.9110-02*
BE	.5632+12	.5632+12	.1100+13	AL	.1177+10	.5051+10	.2074+10
B	.1024+00*	.1024+00*	.1024+00*	SB	.7460-02*	.5746-01*	.1075+00*
CR	.7263+09	.1311+10	.2447+10	CD	.6746+00*	.7496+00*	.5048+09
CO	.2436+00*	.2436+00*	.4136+00*	SE	.7792-01*	.7792-01*	.1619+00*
CU	.5529+00*	.7636+01*	.6595+01*	P	.0000 *	.0000 *	.0000 *
PB	.3641+00*	.5642+01*	.9259+02*	SR	.0000 *	.0000 *	.0000 *
MN	.2962-01*	.3823-01*	.6697-01*				
TOTAL	.57227+12	.59278+12	.11387+13				

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.1324+08	.2494+10
URBAN	.4096+09	.5360+11

TOTAL IMPACT FACTOR = .5609+11
AVERAGE SOURCE IMPACT FACTOR = .1758+09

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF MEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 359.7

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 102 - WALL FIRED BOILER FUEL TYPE 3 - CENTRAL BITUMIN.

CONSUMPTION: TOTAL = .9140 (1E15 KJ/YR) SINGLE SOURCE = .4740-02 (1E15 KJ/YR)

FRACTION: RURAL = .590 URBAN = .410

CONTROLS: NOX = .0014 SOX = .0000 PARTICULATES = .6500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 180.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2425+09	.9434+09	.1566+10
SOX	.7769+10	.1763+11	.2945+11
HC	.6445-02*	.1800+03*	.1840+03*
CO	.1641-02*	.2502+01*	.4002+01*
PART	.1413+10	.8930+10	.1034+11
SULFAT	.1974-01*	.1510+00*	.2315+00*
POM HI	.2238+00*	.4224+01*	.6724+01*
BA	.1199+00*	.7032+00*	.1203+01*
BE	.5632+12	.5632+12	.1100+13
B	.1024+00*	.1024+00*	.1024+00*
CR	.7263+09	.1311+10	.2947+10
CO	.2436+00*	.2436+00*	.4136+00*
CU	.5529+00*	.7636+01*	.6595+01*
PB	.3641+00*	.5642+01*	.4259+02*
MN	.2982-01*	.3823-01*	.8697-01*
TOTAL	.57450+12	.59704+12	.11454+13

POLLUTANT	NATURAL	RURAL	URBAN
HG	.2526+00*	.2526+00*	.1753+01*
MO	.4460-02*	.4460-02*	.4460-02*
NI	.6354+00*	.7807+00*	.1088+09
V	.2225+00*	.2518+00*	.4914+00*
ZN	.1746+00*	.1687+01*	.2528+01*
ZR	.1615-01*	.1615-01*	.1615-01*
AS	.8329-01*	.8329-01*	.1337+00*
BI	.9110-02*	.9110-02*	.9110-02*
AL	.1177+10	.5051+10	.2074+10
SB	.7460-02*	.5746-01*	.1075+00*
CD	.6746+00*	.7496+00*	.5048+09
SE	.7792-01*	.7792-01*	.1619+00*
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.1334+08	.1517+10
URBAN	.4120+09	.3257+11

TOTAL IMPACT FACTOR = .3409+11
AVERAGE SOURCE IMPACT FACTOR = .1768+09

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 859.7

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 102 - WALL FIRED BOILER FUEL TYPE 4 - WESTERN BITUMIN.

CONSUMPTION: TOTAL = .5010 (1E15 KJ/YR) FRACTION: RURAL = .590
SINGLE SOURCE = .4740-02 (1E15 KJ/YR) URBAN = .410

CONTROLS: NOX = .0014
SOX = .0000
PARTICULATES = .6500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 180.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOx	.2425+09	.9434+09	.1566+10
SOX	.3067+10	.7467+10	.1275+11
HC	.6445-02*	.1800+03*	.1840+03*
CO	.1641-02*	.2502+01*	.4002+01*
PART	.1366+10	.8883+10	.1029+11
SULFAT	.1342-01*	.1447+00*	.2251+00*
POM HI	.2238+00*	.4224+01*	.6724+01*
BA	.1199+00*	.7032+00*	.1203+01*
BE	.5632+12	.5632+12	.1100+13
B	.1024+00*	.1024+00*	.1024+00*
CR	.7263+09	.1311+10	.2947+10
CO	.2436+00*	.2436+00*	.4136+00*
CU	.5529+00*	.7636+01*	.6595+01*
PB	.3641+00*	.5642+01*	.4259+02*
MN	.2982-01*	.3823-01*	.8697-01*
TOTAL	.56975+12	.58683+12	.11287+13

POLLUTANT	NATURAL	RURAL	URBAN
HG	.2526+00*	.2526+00*	.1753+01*
MO	.4460-02*	.4460-02*	.4460-02*
NI	.6334+00*	.7807+00*	.1088+09
V	.2225+00*	.2510+00*	.4914+00*
ZN	.1746+00*	.1687+01*	.2528+01*
ZR	.1615-01*	.1615-01*	.1615-01*
AS	.8329-01*	.8329-01*	.1337+00*
BI	.9110-02*	.9110-02*	.9110-02*
AL	.1177+10	.5051+10	.2074+10
SB	.7460-02*	.5746-01*	.1075+00*
CD	.6746+00*	.7496+00*	.5048+09
SE	.7792-01*	.7792-01*	.1619+00*
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.1511+08	.8174+09
URBAN	.4060+09	.1759+11

TOTAL IMPACT FACTOR = .1841+11
AVERAGE SOURCE IMPACT FACTOR = .1742+09

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF REG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 559.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 102 - WALL FIRED BOILER FUEL TYPE 5 - LIGNITE

CONSUMPTION: TOTAL = .1100-01 (1E15 KJ/YR) FRACTION: RURAL = .700
SINGLE SOURCE = .4790-02 (1E15 KJ/YR) URBAN = .300

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .6500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 160.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2879+09	.1080+10	.1783+10
SOX	.4087+09	.1184+10	.2115+10
HC	.6146-01*	.1801+03*	.1841+03*
CO	.2031-02*	.2502+01*	.4002+01*
PART	.2383+10	.1432+11	.1655+11
SULFAT	.2763-02*	.1340+00*	.2145+00*
POM HI	.2238+00*	.4224+01*	.6724+01*
BA	.7516+08	.9173+09	.1392+09
BE	.7394+12	.7394+12	.1276+13
B	.5530-01*	.5530-01*	.5530-01*
CR	.9109+09	.7777+09	.1490+10
CO	.2571+00*	.2571+00*	.4271+00*
CU	.3131+00*	.7396+01*	.6355+01*
PB	.2327+00*	.5510+01*	.4245+02*
MN	.2606-01*	.3496-01*	.6320-01*
TOTAL	.74388+12	.76196+12	.12995+13

POLLUTANT	NATURAL	RURAL	URBAN
HG	.1260+00*	.1260+00*	.1626+01*
MO	.1424-02*	.1424-02*	.1424-02*
NI	.3074+00*	.4527+00*	.9485+00*
V	.1612+00*	.1698+00*	.4301+00*
ZN	.4944-01*	.1562+01*	.2402+01*
ZR	.2647-01*	.2687-01*	.2687-01*
AS	.6717-01*	.6717-01*	.1176+00*
BI	.2190-01*	.2190-01*	.2190-01*
AL	.9485+09	.4826+10	.1660+10
SB	.3330-02*	.5333-01*	.1033+00*
CD	.6994-01*	.1449+00*	.9199+00*
SE	.7590-01*	.7590-01*	.1599+00*
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.1702+08	.2765+08
URBAN	.4674+09	.3254+09

TOTAL IMPACT FACTOR = .3530+09
AVERAGE SOURCE IMPACT FACTOR = .1521+09

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF MEG

TABLE F-1. Continued

1979 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 102 - WALL FIRED BOILER FUEL TYPE 6 - HIGH S RES. OIL

CONSUMPTION: TOTAL = .1969 (1E15 KJ/YR) SINGLE SOURCE = .1979-02 (1E15 KJ/YR)

FRACTION: RURAL = .320 URBAN = .680

CONTROLS: NOX = .0480 SOX = .0000 PARTICULATES = .2500

GAUSSIAN APPROXIMATED SOURCE EFFECTIVE STACK HEIGHT = 110.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.9812+08	.1861+09	.3126+09
SOX	.6204+09	.1498+10	.2552+10
HC	.6631-02*	.1800+03*	.1840+03*
CO	.1025-02*	.2501+01*	.4001+01*
PART	.2352+00*	.1098+02*	.1290+02*
SULFAT	.2437-01*	.1556+00*	.2361+00*
POM HI	.1645-02*	.4002+01*	.6502+01*
BA	.9846-01*	.6738+00*	.1174+01*
BE	.0000 *	.0000 *	.0000 *
B	.1911-02*	.1911-02*	.1911-02*
CR	.3127+09	.5459+09	.9987+09
CO	.5592+00*	.5592+00*	.7292+00*
CU	.2398+00*	.7323+01*	.6262+01*
PB	.3563+00*	.5634+01*	.9258+02*
MN	.9674-02*	.1806-01*	.6662-01*
TOTAL	.53925+10	.70893+10	.11726+11

POLLUTANT	NATURAL	RURAL	URBAN
HG	.8368-01*	.8368-01*	.1584+01*
MO	.9674-02*	.9674-02*	.9674-02*
NI	.3886+10	.4325+10	.7109+10
V	.5251+09	.5322+09	.7530+09
ZN	.1520-01*	.1528+01*	.2368+01*
ZR	.3041-02*	.3041-02*	.3041-02*
AS	.7740-03*	.7740-03*	.5119-01*
BI	.0000 *	.0000 *	.0000 *
AL	.2245+00*	.3907+07	.1653+01*
SB	.7675-03*	.5077-01*	.1006+00*
CD	.3207-01*	.1071+00*	.8821+00*
SE	.2764+00*	.2764+00*	.3604+00*
P	.0000 *	.0000 *	.0000 *
SR	.8373-03*	.8373-03*	.8373-03*

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.1589+06	.6717+07
URBAN	.9218+07	.3801+09

TOTAL IMPACT FACTOR = .3868+09

AVERAGE SOURCE IMPACT FACTOR = .2919+07

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 16% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1900. (M) WIND SPEED = 9.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 859.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 102 - WALL FIRED BOILER FUEL TYPE 7 - RED 5 RES. OIL

CONSUMPTION: TOTAL = .4930 (1E15 KJ/YR) SINGLE SOURCE = .1479-02 (1E15 KJ/YR)

FRACTION: RURAL = .320 URBAN = .680

CONTROLS: NOX = .0480 SOX = .0000 PARTICULATES = .2500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 110.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.4812+08	.1861+09	.3126+09
SOX	.1869+09	.4976+09	.8704+09
HC	.6631-02*	.1800+03*	.1840+03*
CO	.1025-02*	.2501+01*	.4001+01*
PART	.2352+00*	.1090+02*	.1290+02*
SULFAT	.1218-01*	.1434+00*	.2239+00*
POM HI	.1645-02*	.4002+01*	.6502+01*
BA	.9046-01*	.6738+00*	.1174+01*
BE	.0000 *	.0000 *	.0000 *
B	.1911-02*	.1911-02*	.1911-02*
CR	.3127+09	.5459+09	.9987+09
CO	.5592+00*	.5592+00*	.7292+00*
CU	.2398+00*	.7323+01*	.6282+01*
PB	.3563+00*	.5634+01*	.4258+02*
MN	.9674-02*	.1808-01*	.6682-01*
TOTAL	.49589+10	.60884+10	.10044+11

POLLUTANT	NATURAL	RURAL	URBAN
HG	.6388-01*	.6388-01*	.1584+01*
MO	.9674-02*	.9674-02*	.9674-02*
NI	.3886+10	.4325+10	.7109+10
V	.5251+09	.5322+09	.7530+09
ZN	.1520-01*	.1528+01*	.2368+01*
ZR	.3041-02*	.3041-02*	.3041-02*
AS	.7740-03*	.7740-03*	.5119-01*
BI	.0000 *	.0000 *	.0000 *
AL	.2245+00*	.3907+07	.1653+01*
SB	.7675-03*	.5077-01*	.1008+00*
CD	.3207-01*	.1071+00*	.8821+00*
SE	.2764+00*	.2764+00*	.3604+00*
P	.0000 *	.0000 *	.0000 *
SR	.8373-03*	.8373-03*	.8373-03*

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.1360+06	.1451+08
URBAN	.3613+07	.8190+09

TOTAL IMPACT FACTOR = .8335+09
AVERAGE SOURCE IMPACT FACTOR = .2500+07

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 1.0% OF NAAQS

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 102 - WALL FIRED BOILER FUEL TYPE 6 - LOW S RES. OIL

CONSUMPTION: TOTAL = .6370 (1E15 KJ/YR) SINGLE SOURCE = .1479-02 (1E15 KJ/YR)

FRACTION: RURAL = .320 URBAN = .680

CONTROLS: NOX = .0480 SOX = .0000 PARTICULATES = .2500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 110.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN	POLLUTANT	NATURAL	RURAL	URBAN
NOX	.4812+08	.1681+09	.3126+09	HG	.8388-01*	.8388-01*	.1584+01*
SOX	.4516+08	.1359+09	.2448+09	MO	.9674-02*	.9674-02*	.9674-02*
HC	.6631-02*	.1800+03*	.1840+03*	NI	.3886+10	.4325+10	.7109+10
CO	.1025-02*	.2501+01*	.4001+01*	V	.5251+09	.5322+09	.7530+09
PART	.2352+00*	.1090+02*	.1290+02*	ZN	.1520-01*	.1528+01*	.2366+01*
SULFAT	.6091-02*	.1373+00*	.2178+00*	ZR	.3041-02*	.3041-02*	.3041-02*
POM HI	.1645-02*	.4002+01*	.6502+01*	AS	.7740-03*	.7740-03*	.5119-01*
BA	.9046-01*	.6738+00*	.1174+01*	BI	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *	AL	.2245+00*	.3907+07	.1653+01*
B	.1911-02*	.1911-02*	.1911-02*	SB	.7675-03*	.5077-01*	.1008+00*
CR	.3127+09	.5459+09	.9987+09	CD	.3207-01*	.1071+00*	.8821+00*
CO	.5592+00*	.5592+00*	.7292+00*	SE	.2764+00*	.2764+00*	.3604+00*
CU	.2398+00*	.7323+01*	.6282+01*	P	.0000 *	.0000 *	.0000 *
PB	.3563+00*	.5639+01*	.9258+02*	SR	.8373-03*	.8373-03*	.8373-03*
MN	.9674-02*	.1808-01*	.6682-01*				
TOTAL	.48173+10	.57268+10	.94185+10				

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.1279+06	.1763+08
URBAN	.3388+07	.9923+09

TOTAL IMPACT FACTOR = .1818+10
AVERAGE SOURCE IMPACT FACTOR = .2545+07

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF MEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 859.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 102 - WALL FIRED BOILER FUEL TYPE 9 - DISTILLATE OIL

CONSUMPTION: TOTAL = .1690 (1E15 KJ/YR)
SINGLE SOURCE = .1479-02 (1E15 KJ/YR)

FRACTION: RURAL = .580
URBAN = .420

CONTROLS: NOX = .0460
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 110.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.4812+08	.1881+09	.3126+09
SOX	.1176+07	.4815+07	.9182+07
HC	.4626-01*	.1800+03*	.1640+03*
CO	.1195-02*	.2501+01*	.4001+01*
PART	.6168-01*	.1073+02*	.1273+02*
SULFAT	.2843-02*	.1341+00*	.2146+00*
POM HI	.1645-02*	.4002+01*	.6502+01*
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.49300+08	.19296+09	.32179+09

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	4311.	.2857+06
URBAN	.1158+06	.5555+07

TOTAL IMPACT FACTOR = .5841+07
AVERAGE SOURCE IMPACT FACTOR = .5112+05

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 559.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 102 - WALL FIRED BOILER FUEL TYPE 10 - NATURAL GAS

CONSUMPTION: TOTAL = 2.453 (1E15 KJ/YR) SINGLE SOURCE = .2943-02 (1E15 KJ/YR)

FRACTION: RURAL = .590 URBAN = .410

CONTROLS: NOX = .1240 SOX = .0000 PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 60.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2301+09	.6301+09	.9856+09
SOX	.2295-01*	.3148+01*	.6898+01*
HC	.5264-01*	.1801+03*	.1841+03*
CO	.7100-02*	.2507+01*	.4007+01*
PART	.3509+00*	.1102+02*	.1302+02*
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.4152+00*	.4415+01*	.6915+01*
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.23008+09	.63005+09	.98558+09

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.1408+05	.6922+07
URBAN	.3545+06	.1212+09

TOTAL IMPACT FACTOR = .1281+09
AVERAGE SOURCE IMPACT FACTOR = .1537+06

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF MEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 359.7

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 103 - OPPOSED WALL BOILER FUEL TYPE 2 - EASTERN BITUMIN.

CONSUMPTION: TOTAL = .4230 (1E15 KJ/YR) FRACTION: RURAL = .590
SINGLE SOURCE = .1699-01 (1E15 KJ/YR) URBAN = .410

CONTROLS: NOX = .0014
SOX = .0000
PARTICULATES = .6500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 180.8 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOx	.2779+10	.8427+10	.1345+11
SOX	.2188+11	.3174+11	.4357+11
HC	.2311-01*	.1800+03*	.1840+03*
CO	.2311-02*	.2502+01*	.4002+01*
PART	.1056+11	.4421+11	.5052+11
SULFAT	.5518-01*	.1864+00*	.2669+00*
POM HI	.8023+00*	.4802+01*	.7302+01*
BA	.4298+00*	.1259+08	.1513+01*
BE	.2019+13	.2019+13	.2555+13
B	.3671+00*	.3671+00*	.3671+00*
CR	.7050+10	.1145+11	.2000+11
CO	.8734+00*	.8734+00*	.1225+08
CU	.1567+09	.9311+09	.8172+09
PB	.4745+08	.2607+09	.1753+10
MN	.1069+00*	.1153+00*	.1641+00*
TOTAL	.20709+13	.21281+13	.27039+13

POLLUTANT	NATURAL	RURAL	URBAN
HG	.9055+00*	.9055+00*	.2405+01*
MO	.1599-01*	.1599-01*	.1599-01*
NI	.2293+09	.2844+09	.1091+10
V	.7975+00*	.8261+00*	.1994+08
ZN	.6260+00*	.2139+01*	.2979+01*
ZR	.5789-01*	.5789-01*	.5789-01*
AS	.2986+00*	.2986+00*	.3490+00*
BI	.3266-01*	.3266-01*	.3266-01*
AL	.9130+10	.1163+11	.1364+11
SB	.2674-01*	.7674-01*	.1267+00*
CD	.2433+09	.2752+09	.3871+10
SE	.2793+00*	.2793+00*	.3633+00*
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.4754+08	.6982+09
URBAN	.9726+09	.9926+10

TOTAL IMPACT FACTOR = .1062+11
AVERAGE SOURCE IMPACT FACTOR = .4268+09

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) | WIND SPEED = 4.500 (M/S) | RURAL POP. = 22.34 (P/KM2) | URBAN POPL. = 859.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS | EQUIP TYPE 103 - OPPOSED WALL BOILER | FUEL TYPE 3 - CENTRAL BITUMIN.

CONSUMPTION: TOTAL = .2550 (1E15 KJ/YR)
SINGLE SOURCE = .1699-01 (1E15 KJ/YR)

FRACTION: RURAL = .590
URBAN = .410

CONTROLS: NOX = .0014
SOX = .0000
PARTICULATES = .6500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 180.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2779+10	.8427+10	.1345+11
SOX	.2765+11	.3771+11	.4954+11
HC	.2311-01*	.1800+03*	.1840+03*
CO	.2311-02*	.2502+01*	.4002+01*
PART	.1033+11	.4398+11	.5029+11
SULFAT	.7975-01*	.2020+00*	.2825+00*
POM HI	.8023+00*	.4802+01*	.7302+01*
BA	.4298+00*	.1259+06	.1513+01*
BE	.2019+13	.2019+13	.2555+13
B	.3671+00*	.3671+00*	.3671+00*
CR	.7050+10	.1145+11	.2000+11
CO	.8734+00*	.8734+00*	.1225+06
CU	.1567+09	.9311+09	.8172+09
PB	.4745+06	.2607+09	.1753+10
MN	.1069+00*	.1153+00*	.1641+00*
TOTAL	.20767+13	.21338+13	.27097+13

POLLUTANT	NATURAL	RURAL	URBAN
HG	.9055+00*	.9055+00*	.2405+01*
MO	.1599-01*	.1599-01*	.1599-01*
NI	.2293+09	.2844+09	.1091+10
V	.7975+00*	.8261+00*	.1994+08
ZN	.6260+00*	.2139+01*	.2979+01*
ZR	.5789-01*	.5789-01*	.5789-01*
AS	.2986+00*	.2986+00*	.3490+00*
BI	.3266-01*	.3266-01*	.3266-01*
AL	.9130+10	.1165+11	.1364+11
SB	.2674-01*	.7674-01*	.1267+00*
CD	.2433+09	.2752+09	.3871+10
SE	.2793+00*	.2793+00*	.3633+00*
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.4767+08	.4220+09
URBAN	.9747+09	.5997+10

TOTAL IMPACT FACTOR = .6419+10
AVERAGE SOURCE IMPACT FACTOR = .4278+09

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 559.7

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 103 - OPPOSED WALL BOILER FUEL TYPE 4 - WESTERN BITUMIN.

CONSUMPTION: TOTAL = .1480 (1E15 KJ/YR) FRACTION: RURAL = .590
SINGLE SOURCE = .1699-01 (1E15 KJ/YR) URBAN = .410

CONTROLS: NOX = .0014
SOX = .0000
PARTICULATES = .6500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 180.8 (M)

POLLUTANT	NATURAL	RURAL	URBAN	POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2779+10	.8427+10	.1345+11	HG	.9055+00*	.9055+00*	.2405+01*
SOX	.1592+11	.2577+11	.3760+11	MO	.1599-01*	.1599-01*	.1599-01*
HC	.2311-01*	.1800+03*	.1840+03*	NI	.2293+09	.2844+09	.1091+10
CO	.2311-02*	.2502+01*	.4002+01*	V	.7975+00*	.8261+00*	.1994+00
PART	.9983+10	.4363+11	.4994+11	ZN	.6260+00*	.2139+01*	.2979+01*
SULFAT	.4811-01*	.1793+00*	.2598+00*	ZR	.5789-01*	.5789-01*	.5789-01*
POM HI	.8423+00*	.4802+01*	.7302+01*	AS	.2986+00*	.2986+00*	.3490+00*
BA	.4298+00*	.1259+08	.1518+01*	BI	.3266-01*	.3266-01*	.3266-01*
BE	.2019+13	.2019+13	.2555+13	AL	.9130+10	.1163+11	.1364+11
B	.3671+00*	.3671+00*	.3671+00*	SB	.2674-01*	.7674-01*	.1267+00*
CR	.7050+10	.1145+11	.2000+11	CD	.2433+09	.2752+09	.3671+10
CO	.8734+00*	.8734+00*	.1225+08	SE	.2793+00*	.2793+00*	.3633+00*
CU	.1567+09	.9311+09	.8172+09	P	.0000 *	.0000 *	.0000 *
PB	.4745+08	.2607+09	.1753+10	SR	.0000 *	.0000 *	.0000 *
MN	.1069+00*	.1153+00*	.1641+00*				
TOTAL	.20644+13	.21215+13	.26974+13				

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.4759+08	.2304+09
URBAN	.9703+09	.3277+10

TOTAL IMPACT FACTOR = .3508+10
AVERAGE SOURCE IMPACT FACTOR = .4258+09

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) 1974 -- IMPACT PARAMETERS RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 859.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 103 - OPPOSED WALL BOILER FUEL TYPE 5 - LIGNITE

CONSUMPTION: TOTAL = .2100-01 (1E15 KJ/YR)
SINGLE SOURCE = .1699-01 (1E15 KJ/YR)

FRACTION: RURAL = .700
URBAN = .300

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .6500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 180.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.5404+10	.1052+11	.1684+11
SOX	.4223+10	.1009+11	.1714+11
HC	.2203+00*	.1802+03*	.1842+03*
CO	.7281-02*	.2507+01*	.4007+01*
PART	.1382+11	.4747+11	.5378+11
SULFAT	.9905-02*	.1911+00*	.2216+00*
POM HI	.8023+00*	.4802+01*	.7302+01*
BA	.1231+10	.3865+10	.1912+10
BE	.2650+13	.2650+13	.3187+13
B	.1983+00*	.1983+00*	.1983+00*
CR	.4246+10	.7023+10	.1241+11
CO	.9215+00*	.9215+00*	.2035+08
CU	.2081+08	.1566+09	.1367+09
PB	.8341+00*	.6112+01*	.4306+02*
MN	.9343-01*	.1018+00*	.1506+00*
TOTAL	.26857+13	.27404+13	.33022+13

POLLUTANT	NATURAL	RURAL	URBAN
HG	.4516+00*	.4516+00*	.1952+01*
MO	.5105-02*	.5105-02*	.5105-02*
NI	.2043+08	.4154+08	.3078+09
V	.5779+00*	.6065+00*	.8468+00*
ZN	.1772+00*	.1690+01*	.2530+01*
ZR	.9631-01*	.9631-01*	.9631-01*
AS	.2408+00*	.2408+00*	.2912+00*
BI	.7850-01*	.7850-01*	.7850-01*
AL	.8324+10	.1083+11	.1283+11
SB	.1194-01*	.6194-01*	.1119+00*
CD	.2507+00*	.3257+00*	.8009+00*
SE	.2721+00*	.2721+00*	.3561+00*
P	.0000 *	.0000 *	.0000 *
SN	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.6122+08	.5296+08
URBAN	.1186+10	.9404+09

TOTAL IMPACT FACTOR = .4933+09
AVERAGE SOURCE IMPACT FACTOR = .3992+09

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF MEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 103 - OPPOSED WALL BOILER FUEL TYPE 6 - HIGH S RES. OIL

CONSUMPTION: TOTAL = .7900-01 (1E15 KJ/YR) FRACTION: RURAL = .320
SINGLE SOURCE = .7390-02 (1E15 KJ/YR) URRAN = .680

CONTROLS: NOX = .0480
SOX = .0000
PARTICULATES = .2500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 110.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN	POLLUTANT	NATURAL	RURAL	URBAN
NOX	.9205+09	.2707+10	.4295+10	HG	.4191+00*	.4191+00*	.1919+01*
SOX	.8801+10	.1826+11	.3009+11	MO	.4834-01*	.4834-01*	.4834-01*
HC	.3314-01*	.1800+03*	.1840+03*	NI	.2542+11	.2586+11	.2744+11
CO	.4816-02*	.2505+01*	.4005+01*	V	.6860+10	.7253+10	.8346+10
PART	.6661+07	.7129+08	.8340+08	ZN	.7597-01*	.1589+01*	.2429+01*
SULFAT	.1218+00*	.2530+00*	.3335+00*	ZR	.1519-01*	.1519-01*	.1519-01*
POM HI	.8219-02*	.4008+01*	.6508+01*	AS	.3868-02*	.3868-02*	.5429-01*
BA	.4520+00*	.3938+07	.1535+01*	BI	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *	AL	.5030+07	.1431+09	.1177+09
B	.9551-02*	.9551-02*	.9551-02*	SB	.3835-02*	.5349-01*	.1038+00*
CR	.4248+10	.6585+10	.1112+11	CD	.1603+00*	.2353+00*	.3028+07
CO	.6588+08	.6588+08	.9091+08	SE	.1224+08	.1224+08	.1491+08
CU	.7512+07	.5534+08	.4630+08	P	.0000 *	.0000 *	.0000 *
PB	.2385+08	.1141+09	.7457+09	SR	.4184-02*	.4184-02*	.4184-02*
RN	.4834-01*	.5675-01*	.1055+00*				
TOTAL	.45969+11	.61146+11	.82295+11				

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.1366+07	.4675+07
URBAN	.2960+08	.2152+09

TOTAL IMPACT FACTOR = .2199+09
AVERAGE SOURCE IMPACT FACTOR = .2057+08

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 559.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 103 - OPPOSED WALL BOILER FUEL TYPE 7 - RED S RES. OIL

CONSUMPTION: TOTAL = .1990 (1E15 KJ/YR) SINGLE SOURCE = .7390-02 (1E15 KJ/YR)

FRACTION: RURAL = .320 URBAN = .680

CONTROLS: NOX = .0480 SOX = .0000 PARTICULATES = .2500

GAUSSIAN APPROXIMATED SOURCE EFFECTIVE STACK HEIGHT = 110.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN	POLLUTANT	NATURAL	RURAL	URBAN
NOX	.9205+09	.2707+10	.4295+10	HG	.4191+00*	.4191+00*	.1919+01*
SOX	.2795+10	.6293+10	.1049+11	MO	.4834-01*	.4834-01*	.4834-01*
HC	.3314-01*	.1800+03*	.1840+03*	NI	.2542+11	.2568+11	.2744+11
CO	.4816-02*	.2505+01*	.4005+01*	V	.6860+10	.7253+10	.8346+10
PART	.6661+07	.7129+08	.8340+08	ZN	.7597-01*	.1589+01*	.2429+01*
SULFAT	.6088-01*	.1921+00*	.2726+00*	ZR	.1519-01*	.1519-01*	.1519-01*
POM HI	.8219-02*	.4008+01*	.6508+01*	AS	.3868-02*	.3868-02*	.5429-01*
BA	.4520+00*	.3938+07	.1535+01*	BI	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *	AL	.5030+07	.1431+09	.1177+08
B	.9551-02*	.9551-02*	.9551-02*	SB	.3835-02*	.5384-01*	.1038+00*
CR	.9248+10	.6585+10	.1112+11	CD	.1603+00*	.2353+00*	.3026+07
CO	.6588+08	.6588+08	.9091+08	SE	.1224+08	.1224+08	.1491+08
CU	.7512+07	.5534+08	.4830+08	P	.0000 *	.0000 *	.0000 *
PB	.2385+08	.1141+09	.7457+09	SR	.4184-02*	.4184-02*	.4184-02*
MN	.4834-01*	.5675-01*	.1055+00*				
TOTAL	.40364+11	.49178+11	.62692+11				

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.1099+07	.9467+07
URBAN	.2255+08	.4129+09

TOTAL IMPACT FACTOR = .4224+09

AVERAGE SOURCE IMPACT FACTOR = .1369+08

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF REG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 359.7

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 103 - OPPOSED WALL BOILER FUEL TYPE 8 - LOW S RES. OIL

CONSUMPTION: TOTAL = .2580 (1E15 KJ/YR) FRACTION: RURAL = .320 CONTROLS: NOX = .0480
SINGLE SOURCE = .7390-02 (1E15 KJ/YR) URBAN = .680 SOX = .0000
PARTICULATES = .2500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 110.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN	POLLUTANT	NATURAL	RURAL	URBAN
NOX	.9205+09	.2707+10	.4295+10	HG	.4191+00*	.4191+00*	.1919+01*
SOX	.9046+09	.2145+10	.3634+10	MO	.4834-01*	.4834-01*	.4834-01*
HC	.3314-01*	.1800+03*	.1840+03*	NI	.2542+11	.2588+11	.2744+11
CO	.4816-02*	.2505+01*	.4005+01*	V	.6860+10	.7253+10	.8346+10
PART	.6661+07	.7129+08	.8340+08	ZN	.7597-01*	.1589+01*	.2829+01*
SULFAT	.3044-01*	.1617+00*	.2422+00*	ZR	.1519-01*	.1519-01*	.1519-01*
POM HI	.8219-02*	.4008+01*	.6508+01*	AS	.3868-02*	.3868-02*	.5429-01*
BA	.4520+00*	.3938+07	.1535+01*	BI	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *	AL	.5030+07	.1431+09	.1177+09
B	.9551-02*	.9551-02*	.9551-02*	SB	.3835-02*	.5384-01*	.1038+00*
CR	.4248+10	.6585+10	.1112+11	CD	.1603+00*	.2353+00*	.3028+07
CO	.6588+08	.6588+08	.9091+08	SE	.1224+08	.1224+08	.1491+08
CU	.7512+07	.5534+08	.9838+08	P	.0000 *	.0000 *	.0000 *
PB	.2385+08	.1141+09	.7457+09	SR	.4184-02*	.4184-02*	.4184-02*
MN	.4834-01*	.5675-01*	.1055+00*				
TOTAL	.58473+11	.45030+11	.55835+11				

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.1006+07	.1124+08
URBAN	.2008+08	.4768+09

TOTAL IMPACT FACTOR = .4880+09
AVERAGE SOURCE IMPACT FACTOR = .1398+08

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF MEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1900. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 559.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 103 - OPPOSED WALL BOILER FUEL TYPE 9 - DISTILLATE OIL

CONSUMPTION: TOTAL = .1500-01 (1E15 KJ/YR) SINGLE SOURCE = .7390-02 (1E15 KJ/YR)

FRACTION: RURAL = .580 URBAN = .420

CONTROLS: NOX = .0480 SOX = .0000 PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 110.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.9205+09	.2707+10	.4295+10
SOX	.2232+09	.5717+09	.9899+09
HC	.2312+00*	.1802+03*	.1842+03*
CO	.5780-02*	.2506+01*	.4006+01*
PART	.5062+00*	.1097+02*	.1297+02*
SULFAT	.1420-01*	.1454+00*	.2259+00*
POM HI	.8219-02*	.4008+01*	.6508+01*
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.11436+10	.52788+10	.52652+10

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.7325+05	.8623+05
URBAN	.1901+07	.1621+07

TOTAL IMPACT FACTOR = .1707+07
AVERAGE SOURCE IMPACT FACTOR = .8410+06

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.39 URBAN POPL. (P/KM2) = 859.7

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 103 - OPPOSED WALL BOILER FUEL TYPE 10 - NATURAL GAS

CONSUMPTION: TOTAL = 1.256 (1E15 KJ/YR) FRACTION: RURAL = .590
SINGLE SOURCE = .1380-01 (1E15 KJ/YR) URBAN = .410

CONTROLS: NOX = .0700
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 60.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2795+10	.7265+10	.1126+11
SOX	.1077+00*	.3233+01*	.6983+01*
HC	.2469+00*	.1802+03*	.1842+03*
CO	.3072-01*	.2581+01*	.4031+01*
PART	.1646+00*	.1083+02*	.1263+02*
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.5483+07	.2076+08	.3031+08
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.28806+10	.73061+10	.11307+11

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.1632+06	.8775+07
URBAN	.4067+07	.1520+09

TOTAL IMPACT FACTOR = .1607+09
AVERAGE SOURCE IMPACT FACTOR = .1764+07

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1979 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 104 - CYCLONE BOILER FUEL TYPE 2 - EASTERN BITUMIN.

CONSUMPTION: TOTAL = .1580 (1E15 KJ/YR) SINGLE SOURCE = .1357-01 (1E15 KJ/YR)

FRACTION: RURAL = .590 URBAN = .410

CONTROLS: NOX = .0166 SOX = .0000 PARTICULATES = .7500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 180.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.4969+10	.1502+11	.2395+11
SOX	.1972+11	.2957+11	.4141+11
HC	.1384+00*	.1801+03*	.1841+03*
CO	.3884-02*	.2504+01*	.4004+01*
PART	.2365+09	.1898+10	.2210+10
SULFAT	.4408-01*	.1753+00*	.2558+00*
POM HI	.9773-02*	.4010+01*	.6510+01*
BA	.3433+00*	.9266+00*	.1427+01*
BE	.1613+13	.1613+13	.2149+13
B	.2932+00*	.2932+00*	.2932+00*
CR	.4946+10	.8246+10	.1465+11
CO	.6976+00*	.6976+00*	.8676+00*
CU	.8804+08	.5709+09	.4999+09
PB	.1219+08	.7594+08	.5182+09
MN	.8539-01*	.9380-01*	.1425+00*
TOTAL	.16501+13	.16781+13	.22477+13

POLLUTANT	NATURAL	RURAL	URBAN
HG	.7232+00*	.7232+00*	.2223+01*
MO	.1277-01*	.1277-01*	.1277-01*
NI	.1325+09	.1733+09	.7482+09
V	.6370+00*	.6656+00*	.9059+00*
ZN	.5001+00*	.2013+01*	.2853+01*
ZR	.4629-01*	.4629-01*	.4629-01*
AS	.2385+00*	.2385+00*	.2889+00*
BI	.2609-01*	.2609-01*	.2609-01*
AL	.7293+10	.9797+10	.1180+11
SB	.2136-01*	.7136-01*	.1214+00*
CD	.1406+09	.1675+09	.2987+10
SE	.2231+00*	.2231+00*	.3071+00*
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.3749+08	.2575+09
URBAN	.8085+09	.3859+10

TOTAL IMPACT FACTOR = .4116+10

AVERAGE SOURCE IMPACT FACTOR = .3536+09

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1979 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 104 - CYCLONE BOILER FUEL TYPE 3 - CENTRAL BITUMIN.

CONSUMPTION: TOTAL = 1.292 (1E15 KJ/YR) SINGLE SOURCE = .1357-01 (1E15 KJ/YR)

FRACTION: RURAL = .590 URBAN = .410

CONTROLS: NOX = .0166 SOX = .0000 PARTICULATES = .7500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 180.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.9969+10	.1502+11	.2395+11
SOX	.2509+11	.3495+11	.4678+11
HC	.1384+00*	.1801+03*	.1841+03*
CO	.3884-02*	.2504+01*	.4004+01*
PART	.2314+09	.1893+10	.2205+10
SULFAT	.5651-01*	.1877+00*	.2682+00*
POM HI	.9773-02*	.4010+01*	.6510+01*
BA	.3433+00*	.9266+00*	.1427+01*
BE	.1613+13	.1613+13	.2149+13
B	.2932+00*	.2932+00*	.2932+00*
CR	.4946+10	.8246+10	.1465+11
CO	.6976+00*	.6976+00*	.8676+00*
CU	.8804+08	.5709+09	.4999+09
PB	.1219+08	.7544+08	.5182+09
MN	.8539-01*	.9380-01*	.1425+00*
TOTAL	.16555+13	.16835+13	.22531+13

POLLUTANT	NATURAL	RURAL	URBAN
HG	.7232+00*	.7232+00*	.2223+01*
MO	.1277-01*	.1277-01*	.1277-01*
NI	.1325+09	.1735+09	.7482+09
V	.6370+00*	.6656+00*	.9059+00*
ZN	.5001+00*	.2013+01*	.2853+01*
ZR	.4624-01*	.4624-01*	.4624-01*
AS	.2385+00*	.2385+00*	.2889+00*
BI	.2609-01*	.2609-01*	.2609-01*
AL	.7293+10	.9797+10	.1180+11
SB	.2136-01*	.7136-01*	.1214+00*
CD	.1406+09	.1675+09	.2987+10
SE	.2231+00*	.2231+00*	.3071+00*
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.3761+08	.2112+10
URBAN	.8105+09	.3163+11

TOTAL IMPACT FACTOR = .3379+11
AVERAGE SOURCE IMPACT FACTOR = .3545+09

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 104 - CYCLONE BOILER FUEL TYPE 5 - LIGNITE

CONSUMPTION: TOTAL = .1370 (1E15 KJ/YR) FRACTION: RURAL = .700
SINGLE SOURCE = .1357-01 (1E15 KJ/YR) URBAN = .300

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .7500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 180.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2442+10	.7475+10	.1195+11
SOX	.2947+10	.7347+10	.1263+11
HC	.1753+00*	.1802+03*	.1842+03*
CO	.5816-02*	.2506+01*	.4006+01*
PART	.7861+10	.4151+11	.4781+11
SULFAT	.7912-02*	.1391+00*	.2196+00*
POM HI	.9773-02*	.4010+01*	.6510+01*
BA	.8166+09	.2673+10	.1298+10
BE	.2117+13	.2117+13	.2653+13
B	.1584+00*	.1584+00*	.1584+00*
CR	.2963+10	.5044+10	.9085+10
CO	.7361+00*	.7361+00*	.9061+00*
CU	.8964+00*	.7980+01*	.6938+01*
PB	.6663+00*	.5944+01*	.4289+02*
MN	.7462-01*	.8303-01*	.1316+00*
TOTAL	.21404+13	.21903+13	.27466+13

POLLUTANT	NATURAL	RURAL	URBAN
HG	.3607+00*	.3607+00*	.1861+01*
MO	.4077-02*	.4077-02*	.4077-02*
NI	.8803+00*	.1267+08	.1884+09
V	.4616+00*	.4902+00*	.7305+00*
ZN	.1416+00*	.1654+04*	.2494+01*
ZR	.7693-01*	.7693-01*	.7693-01*
AS	.1923+00*	.1923+00*	.2428+00*
BI	.6270-01*	.6270-01*	.6270-01*
AL	.6317+10	.9153+10	.1033+11
SB	.9536-02*	.5954-01*	.1095+00*
CD	.2003+00*	.2753+00*	.4162+08
SE	.2173+00*	.2173+00*	.3014+00*
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.4893+08	.3457+09
URBAN	.9880+09	.2991+10

TOTAL IMPACT FACTOR = .3337+10
AVERAGE SOURCE IMPACT FACTOR = .3306+09

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF MEG

TABLE F-1. Continued

INVERSION HEIGHT = 1500. (M)

1974 -- IMPACT PARAMETERS

WIND SPEED = 4.500 (M/S)

RURAL POP. = 22.34 (P/KM2)

URBAN POPL. = 359.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS

EQUIP TYPE 104 - CYCLONE BOILER

FUEL TYPE 6 - HIGH S RES. OIL

CONSUMPTION: TOTAL = .1200-01 (1E15 KJ/YR)
SINGLE SOURCE = .1979-02 (1E15 KJ/YR)

FRACTION: RURAL = .320
URBAN = .680

CONTROLS: NOX = .0390
SOX = .0000
PARTICULATES = .2500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 110.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.4069+08	.1642+09	.2739+09
SOX	.1040+10	.2432+10	.4103+10
HC	.6211-01*	.1801+03*	.1841+03*
CO	.1599-02*	.2502+01*	.4002+01*
PART	.3147+00*	.1098+02*	.1298+02*
SULFAT	.3260-01*	.1638+00*	.2943+00*
POM HI	.2201-02*	.4002+01*	.6502+01*
BA	.1210+00*	.7044+00*	.1204+01*
BE	.0000 *	.0000 *	.0000 *
B	.2558-02*	.2558-02*	.2558-02*
CR	.4939+09	.8236+09	.1464+10
CD	.7482+00*	.7482+00*	.9182+00*
CU	.3209+00*	.7404+01*	.6363+01*
PB	.4768+00*	.5755+01*	.4270+02*
MN	.1295-01*	.2135-01*	.7009-01*
TOTAL	.83514+10	.11216+11	.15824+11

POLLUTANT	NATURAL	RURAL	URBAN
HG	.1122+00*	.1122+00*	.1612+01*
MO	.1295-01*	.1295-01*	.1295-01*
NI	.5955+10	.6920+10	.8629+10
V	.8217+09	.8761+09	.1155+10
ZN	.2034-01*	.1533+01*	.2373+01*
ZR	.4068-02*	.4068-02*	.4068-02*
AS	.1036-02*	.1036-02*	.5146-01*
BI	.0000 *	.0000 *	.0000 *
AL	.3004+00*	.1243+08	.1729+01*
SB	.1027-02*	.5103-01*	.1010+00*
CD	.4291-01*	.1179+00*	.6929+00*
SE	.3699+00*	.3699+00*	.4539+00*
P	.0000 *	.0000 *	.0000 *
SR	.1120-02*	.1120-02*	.1120-02*

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.2506+06	.4862+06
URBAN	.5692+07	.2347+08

TOTAL IMPACT FACTOR = .2396+08
AVERAGE SOURCE IMPACT FACTOR = .3951+07

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1979 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 339.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 104 - CYCLONE BOILER FUEL TYPE 7 - RED S RES. OIL

CONSUMPTION: TOTAL = .2800-01 (1E15 KJ/YR) FRACTION: RURAL = .320 CONTROLS: NOX = .0390
SINGLE SOURCE = .1979-02 (1E15 KJ/YR) URBAN = .680 SOX = .0000
PARTICULATES = .2500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 110.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN	POLLUTANT	NATURAL	RURAL	URBAN
NOX	.4069+08	.1642+09	.2739+09	HG	.1122+00*	.1122+00*	.1612+01*
SOX	.3226+09	.8157+09	.1407+10	MO	.1295-01*	.1295-01*	.1295-01*
HC	.6211-01*	.1801+03*	.1841+03*	NI	.5955+10	.6920+10	.8829+10
CO	.1599-02*	.2502+01*	.4002+01*	V	.8217+09	.8761+09	.1155+10
PART	.3147+00*	.1096+02*	.1298+02*	ZN	.2034-01*	.1533+01*	.2373+01*
SULFAT	.1630-01*	.1475+00*	.2280+00*	ZR	.4068-02*	.4068-02*	.4068-02*
POM HI	.2201-02*	.4002+01*	.6502+01*	AS	.1036-02*	.1036-02*	.5146-01*
BA	.1210+00*	.7044+00*	.1204+01*	BI	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *	AL	.3004+00*	.1243+00	.1729+01*
B	.2558-02*	.2558-02*	.2558-02*	SB	.1027-02*	.5103-01*	.1010+00*
CR	.4939+09	.8236+09	.1464+10	CD	.4291-01*	.1179+00*	.8929+00*
CO	.7482+00*	.7482+00*	.9182+00*	SE	.3699+00*	.3699+00*	.4539+00*
CU	.3209+00*	.7404+01*	.6363+01*	P	.0000 *	.0000 *	.0000 *
PB	.4768+00*	.5755+01*	.4270+02*	SR	.1120-02*	.1120-02*	.1120-02*
MN	.1295-01*	.2185-01*	.7009-01*				
TOTAL	.76341+10	.95994+10	.13129+11				

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.2145+06	.9710+06
URBAN	.9723+07	.4544+08

TOTAL IMPACT FACTOR = .9691+08
AVERAGE SOURCE IMPACT FACTOR = .3280+07

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 104 - CYCLONE BOILER FUEL TYPE 8 - LOW S RES. OIL

CONSUMPTION: TOTAL = .3780-01 (1E15 KJ/YR)
SINGLE SOURCE = .1979-02 (1E15 KJ/YR)

FRACTION: RURAL = .320
URBAN = .680

CONTROLS: NOX = .0390
SOX = .0000
PARTICULATES = .2500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 110.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN	POLLUTANT	NATURAL	RURAL	URBAN
NOX	.4069+08	.1642+09	.2739+09	HG	.1122+00*	.1122+00*	.1612+01*
SOX	.8643+08	.2413+09	.4270+09	MO	.1295-01*	.1295-01*	.1295-01*
HC	.6211-01*	.1801+03*	.1841+03*	NI	.5955+10	.6920+10	.6829+10
CO	.1599-02*	.2502+01*	.4002+01*	V	.8217+09	.8761+09	.1155+10
PART	.3147+00*	.1098+02*	.1298+02*	ZN	.2034-01*	.1533+01*	.2373+01*
SULFAT	.8151-02*	.1394+00*	.2199+00*	ZR	.4068-02*	.4068-02*	.4068-02*
POM HI	.2201-02*	.4002+01*	.6502+01*	AS	.1036-02*	.1036-02*	.5146-01*
BA	.1210+00*	.7044+00*	.1204+01*	BI	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *	AL	.3004+00*	.1243+08	.1729+01*
B	.2558-02*	.2558-02*	.2558-02*	SB	.1027-02*	.5103-01*	.1010+00*
CR	.4939+09	.8236+09	.1464+10	CD	.4291-01*	.1179+00*	.8929+00*
CO	.7482+00*	.7482+00*	.9182+00*	SE	.3699+00*	.3699+00*	.4539+00*
CU	.3209+00*	.7404+01*	.6363+01*	P	.0000 *	.0000 *	.0000 *
PB	.4768+00*	.5795+01*	.4270+02*	SR	.1120-02*	.1120-02*	.1120-02*
MN	.1295-01*	.2135-01*	.7009-01*				
TOTAL	.73979+10	.90258+10	.12149+11				

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.2016+06	.1206+07
URBAN	.4370+07	.5556+08

TOTAL IMPACT FACTOR = .5677+08
AVERAGE SOURCE IMPACT FACTOR = .3036+07

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.54 URBAN POPL. (P/KM2) = 359.7

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 104 - CYCLONE BOILER FUEL TYPE 10 - NATURAL GAS

CONSUMPTION: TOTAL = .6100-01 (1E15 KJ/YR) FRACTION: RURAL = .590
SINGLE SOURCE = .2321-02 (1E15 KJ/YR) URBAN = .410

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 60.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.1372+09	.3894+09	.6137+09
SOX	.1810-02*	.3127+01*	.6877+01*
HC	.2905+00*	.1803+03*	.1843+03*
CO	.3523-02*	.2504+01*	.4004+01*
PART	.2767+00*	.1094+02*	.1294+02*
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.3274+00*	.4327+01*	.6627+01*
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.13716+09	.38944+09	.61369+09

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	8700.	.1349+06
URBAN	.2208+06	.2379+07

TOTAL IMPACT FACTOR = .2514+07
AVERAGE SOURCE IMPACT FACTOR = .9564+05

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1979 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 105 - VERTICAL + STOKER BOILER FUEL TYPE 1 - ANTHRACITE

CONSUMPTION: TOTAL = .1090 (1E15 KJ/YR) SINGLE SOURCE = .4356-03 (1E15 KJ/YR)

FRACTION: RURAL = .800 URBAN = .200

CONTROLS: NOX = .0000 SOX = .0000 PARTICULATES = .5000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 180.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN	POLLUTANT	NATURAL	RURAL	URBAN
NOX	.1853+00*	.4685+01*	.8685+01*	HG	.2835-01*	.2835-01*	.1526+01*
SOX	.3022+00*	.3427+01*	.7177+01*	MO	.4395-03*	.4395-03*	.4395-03*
HC	.2073-02*	.1800+03*	.1840+03*	NI	.1120+00*	.2573+00*	.7530+00*
CO	.6337-03*	.2501+01*	.4001+01*	V	.6889-02*	.3546-01*	.2758+00*
PART	.1667+00*	.1083+02*	.1283+02*	ZN	.1457-02*	.1514+01*	.2354+01*
SULFAT	.3990-03*	.1316+00*	.2121+00*	ZR	.8469-03*	.8469-03*	.8469-03*
POM HI	.0000 *	.0000 *	.0000 *	AS	.4395-02*	.4395-02*	.5482-01*
BA	.1521-01*	.5985+00*	.1099+01*	BI	.7165-04*	.7165-04*	.7165-04*
BE	.7734+11	.7734+11	.6137+12	AL	.0000 *	.0000 *	.0000 *
B	.6949-04*	.6949-04*	.6949-04*	SB	.4358-04*	.5004-01*	.1000+00*
CR	.3204+09	.6120+09	.1178+10	CD	.1836-02*	.7684-01*	.8516+00*
CO	.1889+00*	.1889+00*	.3589+00*	SE	.6173-03*	.6173-03*	.8465-01*
CU	.8203-01*	.7165+01*	.6124+01*	P	.0000 *	.0000 *	.0000 *
PB	.1836-01*	.5296+01*	.4224+02*	SR	.0000 *	.0000 *	.0000 *
MN	.8025-02*	.1643-01*	.6517-01*				
TOTAL	.77665+11	.77957+11	.61486+12				

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.1742+07	.3486+09
URBAN	.2212+09	.1107+11

TOTAL IMPACT FACTOR = .1142+11
AVERAGE SOURCE IMPACT FACTOR = .4563+08

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1979 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.54 (P/KM2) URBAN POPL. = 559.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 105 - VERTICAL + STOKER BOILER FUEL TYPE 2 - EASTERN BITUMIN.

CONSUMPTION: TOTAL = .1100 (1E15 KJ/YR) SINGLE SOURCE = .4356-03 (1E15 KJ/YR)

FRACTION: RURAL = .590 URBAN = .410

CONTROLS: NOX = .0000 SOX = .0000 PARTICULATES = .5000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 180.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.1853+00*	.4685+01*	.8685+01*
SOX	.4235+08	.1553+09	.2909+09
HC	.3850-02*	.1800+03*	.1840+03*
CO	.2459-03*	.2500+01*	.4000+01*
PART	.9843+00*	.1165+02*	.1365+02*
SULFAT	.1415-02*	.1326+00*	.2131+00*
POM HI	.0000 *	.0000 *	.0000 *
BA	.1102-01*	.5944+00*	.1094+01*
BE	.5176+11	.5176+11	.5881+12
B	.9410-02*	.9410-02*	.9410-02*
CR	.3769+00*	.1855+01*	.4725+01*
CO	.2239-01*	.2239-01*	.1924+00*
CU	.5081-01*	.7134+01*	.6092+01*
PB	.3346-01*	.5311+01*	.4226+02*
MN	.2741-02*	.1114-01*	.5988-01*
TOTAL	.51798+11	.51911+11	.56835+12

POLLUTANT	NATURAL	RURAL	URBAN
HG	.2321-01*	.2321-01*	.1523+01*
MO	.4099-03*	.4099-03*	.4099-03*
NI	.5839-01*	.2037+00*	.6994+00*
V	.2044-01*	.4902-01*	.2894+00*
ZN	.1605-01*	.1529+01*	.2369+01*
ZR	.1484-02*	.1484-02*	.1484-02*
AS	.7654-02*	.7654-02*	.5807-01*
BI	.8372-03*	.8372-03*	.8372-03*
AL	.4757+00*	.1715+09	.1904+01*
SB	.6856-03*	.5069-01*	.1007+00*
CD	.6200-01*	.1370+00*	.9120+00*
SE	.7161-02*	.7161-02*	.9119-01*
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.1160+07	.1728+09
URBAN	.2116+09	.2191+11

TOTAL IMPACT FACTOR = .2208+11
AVERAGE SOURCE IMPACT FACTOR = .6745+08

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 559.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS EQUIP TYPE 105 - VERTICAL + STOKER BOILER FUEL TYPE 3 - CENTRAL BITUMIN.

CONSUMPTION: TOTAL = .1100 (1E15 KJ/YR) SINGLE SOURCE = .4356-03 (1E15 KJ/YR)

FRACTION: RURAL = .590 URBAN = .410

CONTROLS: NOX = .0000 SOX = .0000 PARTICULATES = .5000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 180.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.1853+00*	.4685+01*	.8665+01*
SOX	.9092+08	.3038+09	.5592+09
HC	.3858-02*	.1800+03*	.1840+03*
CO	.2459-03*	.2500+01*	.4000+01*
PART	.9629+00*	.1163+02*	.1363+02*
SULFAT	.1814-02*	.1380+00*	.2135+00*
POM HI	.0000 *	.0000 *	.0000 *
BA	.1102-01*	.5944+00*	.1094+01*
BE	.5176+11	.5176+11	.5881+12
B	.9410-02*	.9410-02*	.9410-02*
CR	.3769+00*	.1855+01*	.4725+01*
CO	.2239-01*	.2239-01*	.1924+00*
CU	.5081-01*	.7134+01*	.6092+01*
PB	.3346-01*	.5311+01*	.4226+02*
MN	.2741-02*	.1114-01*	.5988-01*
TOTAL	.51847+11	.52060+11	.58861+12

POLLUTANT	NATURAL	RURAL	URBAN
HG	.2321-01*	.2321-01*	.1523+01*
MO	.4099-03*	.4099-03*	.4099-03*
NI	.5839-01*	.2037+00*	.6994+00*
V	.2044-01*	.4902-01*	.2894+00*
ZN	.1605-01*	.1529+01*	.2369+01*
ZR	.1484-02*	.1484-02*	.1484-02*
AS	.7654-02*	.7654-02*	.5807-01*
BI	.8372-03*	.8372-03*	.8372-03*
AL	.4757+00*	.1715+09	.1904+01*
SB	.6856-03*	.5069-01*	.1007+00*
CD	.6200-01*	.1370+00*	.9120+00*
SE	.7161-02*	.7161-02*	.9119-01*
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.1163+07	.1733+09
URBAN	.2117+09	.2192+11

TOTAL IMPACT FACTOR = .2209+11
AVERAGE SOURCE IMPACT FACTOR = .8750+08

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

INVERSION HEIGHT = 1500. (M)

1974 -- IMPACT PARAMETERS

WIND SPEED = 4.500 (M/S)

RURAL POP. = 22.34 (P/KM2)

URBAN POPL. = 859.7 (P/KM2)

SECTOR 1 - UTILITY BOILERS

EQUIP TYPE 105 - VERTICAL + STOKER BOILER

FUEL TYPE 5 - LIGNITE

CONSUMPTION: TOTAL = .9060-02 (1E15 KJ/YR)
SINGLE SOURCE = .4356-03 (1E15 KJ/YR)

FRACTION: RURAL = .700
URBAN = .300

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .5000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 180.0 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.1853+00*	.4685+01*	.8685+01*
SOX	.2783+00*	.3403+01*	.7153+01*
HC	.5627-02*	.1800+03*	.1840+03*
CO	.3699-03*	.2500+01*	.4000+01*
PART	.2049+08	.2250+09	.2634+09
SULFAT	.2539-03*	.1315+00*	.2120+00*
POM HI	.0000 *	.0000 *	.0000 *
BA	.1368+00*	.7222+08*	.1222+01*
BE	.6795+11	.6795+11	.6043+12
B	.5082-02*	.5082-02*	.5082-02*
CR	.2798+00*	.1758+01*	.4628+01*
CO	.2362-01*	.2362-01*	.1936+00*
CU	.2877-01*	.7112+01*	.6070+01*
PB	.2138-01*	.5299+01*	.4224+02*
MN	.2395-02*	.1080-01*	.5954-01*
TOTAL	.67968+11	.68173+11	.60457+12

POLLUTANT	NATURAL	RURAL	URBAN
HG	.1158-01*	.1158-01*	.1512+01*
MO	.1309-03*	.1309-03*	.1309-03*
NI	.2825-01*	.1736+00*	.6693+00*
V	.1481-01*	.4339-01*	.2837+00*
ZN	.4543-02*	.1517+01*	.2357+01*
ZR	.2469-02*	.2469-02*	.2469-02*
AS	.6173-02*	.6173-02*	.5659-01*
BI	.2013-02*	.2013-02*	.2013-02*
AL	.4337+00*	.1343+09	.1862+01*
SB	.3061-03*	.5031-01*	.1003+00*
CD	.6427-02*	.8143-01*	.8564+00*
SE	.6975-02*	.6975-02*	.9101-01*
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.1523+07	.2202+08
URBAN	.2175+09	.1348+10

TOTAL IMPACT FACTOR = .1370+10
AVERAGE SOURCE IMPACT FACTOR = .6631+08

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1979 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 359.7

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 201 - WALL FIRED W-TUBE >29 MW FUEL TYPE 9 - DISTILLATE OIL

CONSUMPTION: TOTAL = .8500-01 (1E15 KJ/YR)
SINGLE SOURCE = .7922-03 (1E15 KJ/YR)

FRACTION: RURAL = .330
URBAN = .670

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 80.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2569+08	.9598+08	.1563+09
SOX	.2643+07	.1018+08	.1922+08
HC	.2600-01*	.1800+03*	.1840+03*
CO	.3380-03*	.2500+01*	.4000+01*
PART	.6943-01*	.1076+02*	.1276+02*
SULFAT	.3195-02*	.1344+00*	.2149+00*
POM HI	.2588-02*	.4003+01*	.6503+01*
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.26535+08	.10616+09	.17791+09

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	2372.	.8398+05
URBAN	.6385+05	.4590+07

TOTAL IMPACT FACTOR = .4674+07
AVERAGE SOURCE IMPACT FACTOR = .4356+05

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 559.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 201 - WALL FIRED W-TUBE >29 MW FUEL TYPE 10 - NATURAL GAS

CONSUMPTION: TOTAL = .9280 (1E15 KJ/YR) SINGLE SOURCE = .7922-03 (1E15 KJ/YR)

FRACTION: RURAL = .610 URBAN = .390

CONTROLS: NOX = .0000 SOX = .0000 PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE EFFECTIVE STACK HEIGHT = 80.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2254+08	.8507+08	.1406+09
SOX	.5250-02*	.3128+01*	.6678+01*
HC	.3380-01*	.1800+03*	.1840+03*
CO	.7799-03*	.2501+01*	.4001+01*
PART	.1987-01*	.1069+02*	.1269+02*
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.5878-01*	.4059+01*	.6559+01*
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.2254+08	.8506+08	.1406+09

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	1900.	.1358+07
URBAN	.5059+05	.2511+08

TOTAL IMPACT FACTOR = .2647+08

AVERAGE SOURCE IMPACT FACTOR = .2089+05

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

INVERSION HEIGHT = 1500. (M) 1976 -- IMPACT PARAMETERS WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 201 - WALL FIRED W-TUBE >29 MM FUEL TYPE 11 - PROCESS GAS

CONSUMPTION: TOTAL = .1300 (1E15 KJ/YR) SINGLE SOURCE = .7922-03 (1E15 KJ/YR) FRACTION: RURAL = .610 URBAN = .390

CONTROLS: NOX = .0000 SOX = .0000 PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 80.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2254+08	.8507+08	.1406+09
SOX	.3250-02*	.3128+01*	.6878+01*
HC	.5380-01*	.1800+03*	.1840+03*
CO	.7799-03*	.2501+01*	.4001+01*
PART	.1987-01*	.1069+02*	.1269+02*
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.5878-01*	.4059+01*	.6559+01*
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.22541+08	.85066+08	.14064+09

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	1900.	.1902+06
URBAN	.5059+05	.3238+07

TOTAL IMPACT FACTOR = .3428+07
AVERAGE SOURCE IMPACT FACTOR = .2089+05

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

INVERSION HEIGHT = 1500. (M) 1974 -- IMPACT PARAMETERS WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 559.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 201 - WALL FIRED W-TUBE >29 MW FUEL TYPE 14 - BIT/LIG COAL

CONSUMPTION: TOTAL = .5100 (1E15 KJ/YR)
SINGLE SOURCE = .7922-03 (1E15 KJ/YR)

FRACTION: RURAL = .500
URBAN = .500

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .5000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 80.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2589+08	.9598+08	.1583+09
SOX	.3958+09	.8897+09	.1982+10
HC	.1906-01*	.1800+03*	.1840+03*
CO	.3466-05*	.2500+01*	.4000+01*
PART	.2530+09	.1446+10	.1670+10
SULFAT	.1780-01*	.1490+00*	.2295+00*
POM HI	.2588-02*	.4003+01*	.6503+01*
BA	.1386+00*	.7220+00*	.1222+01*
BE	.1235+12	.1235+12	.6600+12
B	.1184+00*	.1184+00*	.1184+00*
CR	.6976+08	.1218+09	.2227+09
CO	.2817+00*	.2617+00*	.4517+00*
CU	.6392+00*	.7723+01*	.6681+01*
PB	.4210+00*	.5699+01*	.4269+02*
MN	.3498-01*	.4289-01*	.9163-01*
TOTAL	.12439+12	.12678+12	.66368+12

POLLUTANT	NATURAL	RURAL	URBAN
HG	.2920+00*	.2920+00*	.1792+01*
MO	.5157-02*	.5157-02*	.5157-02*
NI	.7346+00*	.8799+00*	.1129+05
V	.2572+00*	.2858+00*	.5261+00*
ZN	.2019+00*	.1715+01*	.2555+01*
ZR	.1867-01*	.1867-01*	.1867-01*
AS	.9630-01*	.9630-01*	.1467+00*
BI	.1053-01*	.1053-01*	.1053-01*
AL	.1051+09	.6795+09	.1762+09
SB	.8626-02*	.5863-01*	.1086+00*
CD	.7800+00*	.8550+00*	.4584+08
SE	.9009-01*	.9009-01*	.1741+00*
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.2832+07	.9117+09
URBAN	.2387+09	.7685+11

TOTAL IMPACT FACTOR = .7776+11
AVERAGE SOURCE IMPACT FACTOR = .1208+09

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF MEG

TABLE F-1. Continued

INVERSION HEIGHT = 1500. (M)

1979 -- IMPACT PARAMETERS

WIND SPEED = 4.500 (M/S)

RURAL POP. = 22.34 (P/KM2)

URBAN POPL. = 559.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS

EQUIP TYPE 201 - WALL FIRED W-TUBE >29 MW

FUEL TYPE 15 - RESIDUAL OIL

CONSUMPTION: TOTAL = .6370 (1E15 KJ/YR)
SINGLE SOURCE = .7922-03 (1E15 KJ/YR)

FRACTION: RURAL = .600
URBAN = .400

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 40.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2589+08	.9598+08	.1583+09
SOX	.6121+08	.1592+09	.2768+09
HC	.2600-01*	.1800+03*	.1840+03*
CO	.3380-03*	.2500+01*	.4000+01*
PART	.9292+00*	.1110+02*	.1310+02*
SULFAT	.1369-01*	.1999+00*	.2254+00*
PON MI	.2568-02*	.4003+01*	.6503+01*
BA	.1017+00*	.6850+00*	.1185+01*
BE	.0000 *	.0000 *	.0000 *
B	.2148-02*	.2148-02*	.2148-02*
CR	.1358+09	.2286+09	.4089+09
CO	.6284+00*	.6284+00*	.7984+00*
CU	.2696+00*	.7353+01*	.6311+01*
PB	.4005+00*	.5678+01*	.4262+02*
MN	.1687-01*	.1928-01*	.6802-01*
TOTAL	.20794+10	.25185+10	.57958+10

POLLUTANT	NATURAL	RURAL	URBAN
HG	.9427-01*	.9427-01*	.1594+01*
MO	.1087-01*	.1087-01*	.1087-01*
NI	.1630+10	.1805+10	.4632+10
V	.2265+09	.2294+09	.3193+09
ZN	.1709-01*	.1530+01*	.2370+01*
ZR	.3417-02*	.3417-02*	.3417-02*
AS	.8698-03*	.8698-03*	.5129-01*
BI	.0000 *	.0000 *	.0000 *
AL	.2523+00*	.2761+07	.1681+01*
SB	.8626-03*	.5086-01*	.1009+00*
CD	.3604-01*	.1110+00*	.8860+00*
SE	.3107+00*	.3107+00*	.3947+00*
P	.0000 *	.0000 *	.0000 *
SR	.9410-03*	.9410-03*	.9410-03*

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.5626+05	.2714+08
URBAN	.2085+07	.6705+09

TOTAL IMPACT FACTOR = .6977+09
AVERAGE SOURCE IMPACT FACTOR = .8677+06

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1979 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 859.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 202 - STOKER W-TUBE >29 MW FUEL TYPE 14 - BIT/LIG COAL

CONSUMPTION: TOTAL = .4660 (1E15 KJ/YR) SINGLE SOURCE = .5095-03 (1E15 KJ/YR)

FRACTION: RURAL = .630 URBAN = .370

CONTROLS: NOX = .0000 SOX = .0000 PARTICULATES = .5000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 80.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.5996+07	.2725+08	.4615+08
SOX	.3280+09	.7680+09	.1296+10
HC	.2396-01*	.1800+03*	.1840+03*
CO	.1393-02*	.2501+01*	.4001+01*
PART	.1698+09	.9669+09	.1116+10
SULFAT	.1145-01*	.1927+00*	.2232+00*
POM HI	.1623-02*	.4002+01*	.6502+01*
BA	.8916-01*	.6725+00*	.1172+01*
BE	.7946+11	.7946+11	.6159+12
B	.7615-01*	.7615-01*	.7615-01*
CR	.3044+08	.5644+08	.1069+09
CO	.1812+00*	.1812+00*	.3512+00*
CU	.9111+00*	.7494+01*	.6953+01*
PB	.2788+00*	.5549+01*	.4249+02*
MN	.2218-01*	.3058-01*	.7932-01*
TOTAL	.80038+11	.81644+11	.61853+12

POLLUTANT	NATURAL	RURAL	URBAN
HG	.1878+00*	.1878+00*	.1688+01*
MO	.3317-02*	.3317-02*	.3317-02*
NI	.4725+00*	.6178+00*	.3838+07
V	.1654+00*	.1940+00*	.4343+00*
ZN	.1299+00*	.1642+01*	.2483+01*
ZR	.1201-01*	.1201-01*	.1201-01*
AS	.6194-01*	.6194-01*	.1124+00*
BI	.6774-02*	.6774-02*	.6774-02*
AL	.4700+08	.3681+09	.8261+09
SB	.5548-02*	.5555-01*	.1055+00*
CD	.5017+00*	.5767+00*	.2213+08
SE	.5794-01*	.5794-01*	.1420+00*
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.1824+07	.1051+10
URBAN	.2225+09	.7529+11

TOTAL IMPACT FACTOR = .7635+11
AVERAGE SOURCE IMPACT FACTOR = .8347+08

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1976 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 859.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 203 - SINGLE BURNER W-T <29 MW FUEL TYPE 9 - DISTILLATE OIL

CONSUMPTION: TOTAL = .1030 (1E15 KJ/YR)
SINGLE SOURCE = .8903-04 (1E15 KJ/YR)

FRACTION: RURAL = .660
URBAN = .340

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 30.80 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.5712+00*	.5071+01*	.9071+01*
SOX	.1655+06	.6362+06	.1201+07
HC	.3639-02*	.1800+03*	.1880+03*
CO	.1359-03*	.2500+01*	.4000+01*
PART	.9252-01*	.1076+02*	.1276+02*
SULFAT	.8120-02*	.1344+00*	.2148+00*
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.16545+06	.63621+06	.12011+07

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	14.21	.1085+05
URBAN	432.1	.1699+06

TOTAL IMPACT FACTOR = .1808+06
AVERAGE SOURCE IMPACT FACTOR = 156.3

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF MEQ

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 203 - SINGLE BURNER W-T <29 MW FUEL TYPE 10 - NATURAL GAS

CONSUMPTION: TOTAL = 1.690 (1E15 KJ/YR) SINGLE SOURCE = .1392-03 (1E15 KJ/YR)

FRACTION: RURAL = .900 URBAN = .100

CONTROLS: NOX = .0000 SOX = .0000 PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 30.00 (M)

POLLUTANT	NATURAL		RURAL		URBAN	
NOX	.2811+06		.1346+07		.2293+07	
SOX	.5625-01	*	.3161+01	*	.6931+01	*
HC	.2250-01	*	.1800+03	*	.1840+03	*
CO	.1138-02	*	.2501+01	*	.4001+01	*
PART	.6000-01	*	.1073+02	*	.1273+02	*
SULFAT	.4182-01	*	.1731+00	*	.2536+00	*
POM HI	.8977-01	*	.4090+01	*	.6590+01	*
BA	.0000	*	.0000	*	.0000	*
BE	.0000	*	.0000	*	.0000	*
B	.0000	*	.0000	*	.0000	*
CR	.0000	*	.0000	*	.0000	*
CO	.0000	*	.0000	*	.0000	*
CU	.0000	*	.0000	*	.0000	*
PB	.0000	*	.0000	*	.0000	*
MN	.0000	*	.0000	*	.0000	*
TOTAL	.28109+06		.13461+07		.22927+07	

POLLUTANT	NATURAL		RURAL		URBAN	
HG	.0000	*	.0000	*	.0000	*
MO	.0000	*	.0000	*	.0000	*
NI	.0000	*	.0000	*	.0000	*
V	.0000	*	.0000	*	.0000	*
ZN	.0000	*	.0000	*	.0000	*
ZR	.0000	*	.0000	*	.0000	*
AS	.0000	*	.0000	*	.0000	*
BI	.0000	*	.0000	*	.0000	*
AL	.0000	*	.0000	*	.0000	*
SB	.0000	*	.0000	*	.0000	*
CD	.0000	*	.0000	*	.0000	*
SE	.0000	*	.0000	*	.0000	*
P	.0000	*	.0000	*	.0000	*
SR	.0000	*	.0000	*	.0000	*

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	30.07	.3265+06
URBAN	824.7	.1001+07

TOTAL IMPACT FACTOR = .1329+07
AVERAGE SOURCE IMPACT FACTOR = 109.5

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF MEG

TABLE F-1. Continued

1979 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 203 - SINGLE BURNER W-T <29 MW FUEL TYPE 11 - PROCESS GAS

CONSUMPTION: TOTAL = .1300 (1E15 KJ/YR)
SINGLE SOURCE = .1809-03 (1E15 KJ/YR)

FRACTION: RURAL = .900
URBAN = .100

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 30.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.5787+06	.2466+07	.4144+07
SOX	.7287-01*	.3198+01*	.6948+01*
HC	.2915-01*	.1800+03*	.1840+03*
CO	.1475-02*	.2501+01*	.4001+01*
PART	.7773-01*	.1074+02*	.1274+02*
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.1163+00*	.4116+01*	.6616+01*
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.57868+06	.24661+07	.41438+07

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	55.09	.3573+05
URBAN	1491.	.1074+06

TOTAL IMPACT FACTOR = .1432+06
AVERAGE SOURCE IMPACT FACTOR = 198.6

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF MEG

TABLE F-1. Continued

INVERSION HEIGHT = 1500. (M)

1974 -- IMPACT PARAMETERS

WIND SPEED = 4.500 (M/S)

RURAL POP. = 22.34 (P/KM2)

URBAN POPL. = 339.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS

EQUIP TYPE 203 - SINGLE BURNER W-T <29 MW

FUEL TYPE 15 - RESIDUAL OIL

CONSUMPTION: TOTAL = .5950 (1E15 KJ/YR)
SINGLE SOURCE = .9989-04 (1E15 KJ/YR)

FRACTION: RURAL = .700
URBAN = .300

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 30.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.6488+06	.2762+07	.4640+07
SOX	.6108+07	.1484+08	.2532+08
HC	.8166-02*	.1800+03*	.1840+03*
CO	.3228-03*	.2500+01*	.4000+01*
PART	.4950+00*	.1116+02*	.1316+02*
SULFAT	.1560-01*	.1462+00*	.2267+00*
POM NI	.0000 *	.0000 *	.0000 *
BA	.1114+00*	.6947+00*	.1195+01*
BE	.0000 *	.0000 *	.0000 *
B	.2354-02*	.2354-02*	.2354-02*
CR	.1001+00	.1658+00	.2935+00
CO	.6886+00*	.6886+00*	.8586+00*
CU	.2954+00*	.7379+01*	.6337+01*
PB	.4388+00*	.5717+01*	.4266+02*
MN	.1191-01*	.2032-01*	.6906-01*
TOTAL	.13398+09	.16145+09	.33151+09

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.1191-01*	.1191-01*	.1191-01*
NI	.1016+09	.1114+09	.2507+09
V	.1565+08	.1564+08	.2154+08
ZN	.1872-01*	.1531+01*	.2372+01*
ZR	.3744-02*	.3744-02*	.3744-02*
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.2765+00*	.2472+06	.1705+01*
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.3404+00*	.3404+00*	.4244+00*
P	.0000 *	.0000 *	.0000 *
SR	.1031-02*	.1031-02*	.1031-02*

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	3607.	.1504+08
URBAN	.1192+06	.2131+09

TOTAL IMPACT FACTOR = .2281+09
AVERAGE SOURCE IMPACT FACTOR = .3830+05

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF MEG

TABLE F-1. Continued

INVERSION HEIGHT = 1500. (M)

1974 -- IMPACT PARAMETERS

WIND SPEED = 4.500 (M/S)

RURAL POP. = 22.34 (P/KM2)

URBAN POPL. = 359.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS

EQUIP TYPE 204 - SCOTCH FIRETUBE <29 MW

FUEL TYPE 9 - DISTILLATE OIL

CONSUMPTION: TOTAL = .4460 (1E15 KJ/YR)
SINGLE SOURCE = .2774-04 (1E15 KJ/YR)

FRACTION: RURAL = .660
URBAN = .340

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 20.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.4180+00*	.4918+01*	.8918+01*
SOX	.8398+00*	.3965+01*	.7715+01*
HC	.2663-02*	.1800+03*	.1840+03*
CO	.9908-04*	.2500+01*	.4000+01*
PART	.6027-01*	.1073+02*	.1273+02*
SULFAT	.2283-02*	.1335+00*	.2140+00*
POM HI	.1443+08	.3442+08	.4691+08
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.14435+08	.34420+08	.46910+08

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	768.9	.8159+07
URBAN	.1687+05	.9223+08

TOTAL IMPACT FACTOR = .1008+09
AVERAGE SOURCE IMPACT FACTOR = 6245.

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 204 - SCOTCH FIRETUBE <29 KW FUEL TYPE 10 - NATURAL GAS

CONSUMPTION: TOTAL = .9720 (1E15 KJ/YR) FRACTION: RURAL = .900
SINGLE SOURCE = .4314-04 (1E15 KJ/YR) URBAN = .100

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 20.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN	POLLUTANT	NATURAL	RURAL	URBAN
NOX	.9524+00*	.5452+01*	.9452+01*	HG	.0000 *	.0000 *	.0000 *
SOX	.3611-03*	.3125+01*	.6875+01*	MO	.0000 *	.0000 *	.0000 *
HC	.1637-01*	.1800+03*	.1840+03*	NI	.0000 *	.0000 *	.0000 *
CO	.8282-03*	.2501+01*	.4001+01*	V	.0000 *	.0000 *	.0000 *
PART	.3338-01*	.1070+02*	.1270+02*	ZN	.0000 *	.0000 *	.0000 *
SULFAT	.0000 *	.0000 *	.0000 *	ZR	.0000 *	.0000 *	.0000 *
POM HI	.8252+08	.1828+09	.2454+09	AS	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *	BI	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *	AL	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *	SB	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *	CD	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *	SE	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *	P	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *	SR	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *				
TOTAL	.82519+08	.18276+09	.24542+09				

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	4083.	.8279+08
URBAN	.8828+05	.1989+09

TOTAL IMPACT FACTOR = .2817+09
AVERAGE SOURCE IMPACT FACTOR = .1250+05

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 204 - SCOTCH FIRETUBE <29 MW FUEL TYPE 11 - PROCESS GAS

CONSUMPTION: TOTAL = .1900-01 (1E15 KJ/YR) SINGLE SOURCE = .6909-04 (1E15 KJ/YR)

FRACTION: RURAL = .900 URBAN = .100

CONTROLS: NOX = .0000 SOX = .0000 PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 20.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.1873+06	.8595+06	.1457+07
SOX	.5783-03*	.3126+01*	.6876+01*
HC	.2622-01*	.1800+03*	.1840+03*
CO	.1326-02*	.2501+01*	.4001+01*
PART	.5346-01*	.1072+02*	.1272+02*
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.1608+09	.3496+09	.4677+09
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.16098+09	.35049+09	.46912+09

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	7830.	.1938+07
URBAN	.1687+06	.4640+07

TOTAL IMPACT FACTOR = .6578+07
AVERAGE SOURCE IMPACT FACTOR = .2392+05

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

INVERSION HEIGHT = 1500. (M)

1974 -- IMPACT PARAMETERS

WIND SPEED = 4.500 (M/S)

RURAL POP. = 22.84 (P/KM2)

URBAN POPL. = 859.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS

EQUIP TYPE 204 - SCOTCH FIRETUBE <29 MM

FUEL TYPE 15 - RESIDUAL OIL

CONSUMPTION: TOTAL = .9450 (1E15 KJ/YR)
SINGLE SOURCE = .3196-04 (1E15 KJ/YR)

FRACTION: RURAL = .700
URBAN = .300

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 20.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.1017+06	.4818+06	.8196+06
SOX	.1376+07	.3562+07	.6186+07
HC	.6135-02*	.1600+03*	.1840+03*
CO	.2426-03*	.2500+01*	.4000+01*
PART	.3719+00*	.1104+02*	.1304+02*
SULFAT	.1127-01*	.1425+00*	.2230+00*
POM HI	.1806+08	.4323+08	.5896+08
BA	.8369-01*	.6670+00*	.1167+01*
BE	.0000 *	.0000 *	.0000 *
B	.1768-02*	.1768-02*	.1768-02*
CR	.2160+07	.3627+07	.6473+07
CO	.5174+00*	.5174+00*	.6874+00*
CU	.2219+00*	.7305+01*	.6264+01*
PB	.3297+00*	.5607+01*	.4255+02*
MN	.8951-02*	.1755-01*	.6609-01*
TOTAL	.46928+08	.79255+08	.12928+09

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.8951-02*	.8951-02*	.8951-02*
NI	.2164+08	.2472+08	.5210+08
V	.3567+07	.3632+07	.4746+07
ZN	.1407-01*	.1527+01*	.2367+01*
ZR	.2813-02*	.2813-02*	.2813-02*
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.2077+00*	.3213+05	.1636+01*
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.2557+00*	.2557+00*	.3396+00*
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	1771.	.3664+08
URBAN	.4650+05	.4125+09

TOTAL IMPACT FACTOR = .4491+09
AVERAGE SOURCE IMPACT FACTOR = .1519+05

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 859.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 205 - FIREBOX FIRETUBE <29 MW FUEL TYPE - 9 - DISTILLATE OIL

CONSUMPTION: TOTAL = .4030 (1E15 KJ/YR)
SINGLE SOURCE = .2584-04 (1E15 KJ/YR)

FRACTION: RURAL = .660
URBAN = .340

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 20.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.3894+00*	.4889+01*	.8869+01*
SOX	.7823+00*	.3907+01*	.7657+01*
HC	.2480-02*	.1800+03*	.1840+03*
CO	.9230-04*	.2500+01*	.4000+01*
PART	.5615-01*	.1072+02*	.1272+02*
SULFAT	.2127-02*	.1334+00*	.2139+00*
POM HI	.1289+08	.3071+08	.4184+08
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.12894+08	.30706+08	.41839+08

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	686.0	.7060+07
URBAN	.1505+05	.7979+08

TOTAL IMPACT FACTOR = .8685+08
AVERAGE SOURCE IMPACT FACTOR = 5570.

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10%, OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 559.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 205 - FIREBOX FIRETUBE <29 MW FUEL TYPE 10 - NATURAL GAS

CONSUMPTION: TOTAL = .8990 (1E15 KJ/YR) SINGLE SOURCE = .4008-04 (1E15 KJ/YR)

FRACTION: RURAL = .900 URBAN = .100

CONTROLS: NOX = .0000 SOX = .0000 PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 20.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN	POLLUTANT	NATURAL	RURAL	URBAN
NOX	.8849+00*	.5385+01*	.9385+01*	HG	.0000 *	.0000 *	.0000 *
SOX	.3355-02*	.3128+01*	.6878+01*	MO	.0000 *	.0000 *	.0000 *
HC	.1521-01*	.1800+03*	.1840+03*	NI	.0000 *	.0000 *	.0000 *
CO	.7694-03*	.2501+01*	.4001+01*	V	.0000 *	.0000 *	.0000 *
PART	.3102-01*	.1070+02*	.1270+02*	ZN	.0000 *	.0000 *	.0000 *
SULFAT	.0000 *	.0000 *	.0000 *	ZR	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *	AS	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *	BI	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *	AL	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *	SB	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *	CD	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *	SE	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *	P	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *	SR	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *				
TOTAL	.00000	.00000	.00000				

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000
AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

INVERSION HEIGHT = 1500. (M)

1974 -- IMPACT PARAMETERS

WIND SPEED = 4.500 (M/S)

RURAL POP. = 22.34 (P/KM2)

URBAN POPL. = 359.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS

EQUIP TYPE 205 - FIREBOX FIRETUBE <29 MW

FUEL TYPE 11 - PROCESS GAS

CONSUMPTION: TOTAL = .1900-01 (1E15 KJ/YR)
SINGLE SOURCE = .6666-04 (1E15 KJ/YR)

FRACTION: RURAL = .900
URBAN = .100

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 20.69 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.1463+06	.6587+06	.1114+07
SOX	.5580-02*	.3131+01*	.6881+01*
HC	.2530-01*	.1600+03*	.1040+03*
CO	.1280-02*	.2501+01*	.4001+01*
PART	.5150-01*	.1072+02*	.1272+02*
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.14626+06	.65870+06	.11142+07

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	14.72	3774.
URBAN	400.8	.1142+05

TOTAL IMPACT FACTOR = .1520+05
AVERAGE SOURCE IMPACT FACTOR = 53.32

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1979 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 339.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 205 - FIREBOX FIRETUBE <29 KW FUEL TYPE 15 - RESIDUAL OIL

CONSUMPTION: TOTAL = .6090 (1E15 KJ/YR)
SINGLE SOURCE = .2985-04 (1E15 KJ/YR)

FRACTION: RURAL = .700
URBAN = .300

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 20.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.9599+05	.4769+06	.8185+06
SOX	.1211+07	.3161+07	.5501+07
HC	.5730-02*	.1800+03*	.1840+03*
CO	.2265-03*	.2500+01*	.4000+01*
PART	.3474+00*	.1101+02*	.1301+02*
SULFAT	.1053-01*	.1418+00*	.2223+00*
POR HI	.1619+08	.3862+08	.5264+08
BA	.7817-01*	.6615+00*	.1162+01*
BE	.0000 *	.0000 *	.0000 *
B	.1652-02*	.1652-02*	.1652-02*
CR	.1910+07	.3217+07	.5755+07
CO	.4832+00*	.4832+00*	.6532+00*
CU	.2073+00*	.7291+01*	.6249+01*
PB	.3079+00*	.5586+01*	.4253+02*
MN	.8360-02*	.1676-01*	.6550-01*
TOTAL	.42611+08	.70898+08	.11571+09

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.8360-02*	.8360-02*	.8360-02*
NI	.2022+08	.2219+08	.4676+08
V	.3187+07	.3227+07	.4229+07
ZN	.1314-01*	.1526+01*	.2366+01*
ZR	.2628-02*	.2628-02*	.2628-02*
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.1940+00*	.9877+00*	.1623+01*
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.2389+00*	.2389+00*	.3229+00*
P	.0000 *	.0000 *	.0000 *
SN	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	1584.	.2262+08
URBAN	.4162+05	.2547+09

TOTAL IMPACT FACTOR = .2773+09
AVERAGE SOURCE IMPACT FACTOR = .1359+05

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 859.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 206 - STOKER FIRED W-TUBE <29 MW FUEL TYPE 1 - ANTHRACITE

CONSUMPTION: TOTAL = .2100-01 (1E15 KJ/YR)
SINGLE SOURCE = .1951-03 (1E15 KJ/YR)

FRACTION: RURAL = .760
URBAN = .240

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .1500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 30.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2467+07	.8711+07	.1426+08
SOX	.1076+08	.2466+08	.4133+08
HC	.5565-01*	.1801+03*	.1841+03*
CO	.1707-01*	.2517+01*	.4017+01*
PART	.1025+08	.5769+08	.6659+08
SULFAT	.1075-01*	.1420+00*	.2225+00*
POM HI	.0000 *	.0000 *	.0000 *
BA	.4095+00*	.9928+00*	.1493+01*
BE	.5214+11	.5214+11	.5886+12
B	.1871-02*	.1871-02*	.1871-02*
CR	.3050+09	.4525+09	.7388+09
CO	.5138+07	.5138+07	.6279+07
CU	.1061+07	.5868+07	.5161+07
PB	.4946+00*	.5772+01*	.4272+02*
MN	.2161+00*	.2245+00*	.2733+00*
TOTAL	.52476+11	.52696+11	.58945+12

POLLUTANT	NATURAL	RURAL	URBAN
HG	.7636+00*	.7636+00*	.2264+01*
MO	.1184-01*	.1184-01*	.1184-01*
NI	.1965+07	.2625+07	.7109+07
V	.1855+00*	.2141+00*	.4544+00*
ZN	.3923-01*	.1552+01*	.2392+01*
ZR	.2281-01*	.2281-01*	.2281-01*
AS	.1184+00*	.1184+00*	.1686+00*
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.1662-01*	.1662-01*	.1007+00*
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.1177+07	.9628+08
URBAN	.2120+09	.5476+10

TOTAL IMPACT FACTOR = .5572+10
AVERAGE SOURCE IMPACT FACTOR = .5178+08

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NES

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 339.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 206 - STOKER FIRED W-TUBE <29 MW FUEL TYPE 14 - BIT/LIG COAL

CONSUMPTION: TOTAL = 1.533 (1E15 KJ/YR)
SINGLE SOURCE = .1951-03 (1E15 KJ/YR)

FRACTION: RURAL = .590
URBAN = .410

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .1500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 50.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2967+07	.8711+07	.1426+08
SOX	.9663+08	.1952+09	.3135+09
HC	.3339+00*	.1803+03*	.1843+03*
CO	.3895-02*	.2504+01*	.4004+01*
PART	.1452+09	.6487+09	.7431+09
SULFAT	.3810-01*	.1693+00*	.2498+00*
POM HI	.0000 *	.0000 *	.0000 *
BA	.2967+00*	.8801+00*	.1380+01*
BE	.3489+11	.3489+11	.5713+12
B	.2534+00*	.2534+00*	.2534+00*
CR	.1556+08	.2484+08	.4286+08
CO	.6030+00*	.6030+00*	.7730+00*
CU	.3469+06	.2381+07	.2082+07
PB	.9012+00*	.6179+01*	.4312+02*
MN	.7361-01*	.6222-01*	.1310+00*
TOTAL	.35173+11	.35874+11	.57248+12

POLLUTANT	NATURAL	RURAL	URBAN
HG	.6251+00*	.6251+00*	.2125+01*
MO	.1104-01*	.1104-01*	.1104-01*
NI	.4918+06	.7250+06	.2675+07
V	.5506+00*	.5792+00*	.8195+00*
ZN	.4322+00*	.1945+01*	.2785+01*
ZR	.3996-01*	.3996-01*	.3996-01*
AS	.2061+00*	.2061+00*	.2566+00*
BI	.2255-01*	.2255-01*	.2255-01*
AL	.2261+08	.1035+09	.3529+08
SB	.1846-01*	.6846-01*	.1185+00*
CD	.5698+06	.6553+06	.8681+07
SE	.1928+00*	.1928+00*	.2769+00*
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.8014+06	.3714+10
URBAN	.2059+09	.6633+12

TOTAL IMPACT FACTOR = .6670+12
AVERAGE SOURCE IMPACT FACTOR = .8490+08

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1979 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 559.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 208 - CAST IRON BOILERS FUEL TYPE 9 - DISTILLATE OIL

CONSUMPTION: TOTAL = .1810 (1E15 KJ/YR) SINGLE SOURCE = .4641-05 (1E15 KJ/YR)

FRACTION: RURAL = .600 URBAN = .400

CONTROLS: NOX = .0000 SOX = .0000 PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 20.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN	POLLUTANT	NATURAL	RURAL	URBAN
NOX	.6993-01*	.4570+01*	.8570+01*	HG	.0000 *	.0000 *	.0000 *
SOX	.1405+00*	.3266+01*	.7016+01*	MO	.0000 *	.0000 *	.0000 *
HC	.4455-03*	.1800+03*	.1840+03*	NI	.0000 *	.0000 *	.0000 *
CO	.1658-04*	.2500+01*	.4000+01*	V	.0000 *	.0000 *	.0000 *
PART	.5111-02*	.1067+02*	.1267+02*	ZN	.0000 *	.0000 *	.0000 *
SULFAT	.3819-03*	.1316+00*	.2121+00*	ZR	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *	AS	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *	BI	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *	AL	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *	SB	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *	CD	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *	SE	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *	P	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *	SR	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *				
TOTAL	.00000	.00000	.00000				

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000
AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

INVERSION HEIGHT = 1500. (M)

1974 -- IMPACT PARAMETERS

WIND SPEED = 4.500 (M/S)

RURAL POP. = 22.34 (P/KM2)

URBAN POPL. = 339.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS

EQUIP TYPE 208 - CAST IRON BOILERS

FUEL TYPE 10 - NATURAL GAS

CONSUMPTION: TOTAL = .2690 (1E15 KJ/YR)
SINGLE SOURCE = .7173-05 (1E15 KJ/YR)

FRACTION: RURAL = .700
URBAN = .300

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 20.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.8261-01*	.4583+01*	.8583+01*
SOX	.6004-03*	.3126+01*	.6876+01*
HC	.4163-02*	.1800+03*	.1840+03*
CO	.1377-03*	.2500+01*	.4000+01*
PART	.3629-02*	.1067+02*	.1267+02*
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.00000	.00000	.00000

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000
AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 208 - CAST IRON BOILERS FUEL TYPE 15 - RESIDUAL OIL

CONSUMPTION: TOTAL = .1950 (1E15 KJ/YR) SINGLE SOURCE = .5527-05 (1E15 KJ/YR)

FRACTION: RURAL = .600 URBAN = .400

CONTROLS: NOX = .0000 SOX = .0000 PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 20.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2270+00*	.4727+01*	.8727+01*
SOX	.7433+00*	.3868+01*	.7618+01*
HC	.1061-02*	.1800+03*	.1840+03*
CO	.4195-04*	.2500+01*	.4000+01*
PART	.6432-01*	.1073+02*	.1273+02*
SULFAT	.1949-02*	.1332+00*	.2137+00*
POM HI	.0000 *	.0000 *	.0000 *
BA	.1447-01*	.5976+00*	.1098+01*
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.9840+00*	.2462+01*	.5332+01*
CO	.6947-01*	.8947-01*	.2595+00*
CU	.3638-01*	.7122+01*	.6080+01*
PB	.5702-01*	.5335+01*	.4228+02*
MN	.1548-02*	.9951-02*	.5869-01*
TOTAL	.15603+07	.18684+07	.46975+07

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.1548-02*	.1548-02*	.1548-02*
NI	.1440+07	.1745+07	.4466+07
V	.1203+06	.1232+06	.2317+06
ZN	.2433-02*	.1515+01*	.2355+01*
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.3592-01*	.8296+00*	.1464+01*
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.4423-01*	.4423-01*	.1283+00*
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	41.74	.8835+06
URBAN	1690.	.2384+08

TOTAL IMPACT FACTOR = .2973+08
AVERAGE SOURCE IMPACT FACTOR = 700.9

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 209 - STOKER F-T BOILER <29 MW FUEL TYPE 1 - ANTHRACITE

CONSUMPTION: TOTAL = .4200-01 (1E15 KJ/YR)
SINGLE SOURCE = .2447-04 (1E15 KJ/YR)

FRACTION: RURAL = .760
URBAN = .240

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .1500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 20.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.9778+00*	.5478+01*	.9478+01*
SOX	.4494+06	.1309+07	.2341+07
HC	.1639-01*	.1800+03*	.1840+03*
CO	.5025-02*	.2505+01*	.4005+01*
PART	.4235+06	.3304+07	.3844+07
SULFAT	.3165-02*	.1344+00*	.2149+00*
POM HI	.1453+07	.4251+07	.6001+07
BA	.1206+08*	.7039+00*	.1204+01*
BE	.5467+10	.5467+10	.2743+12
B	.0000 *	.0000 *	.0000 *
CR	.1663+08	.2492+08	.4102+08
CO	.1628+06	.1628+06	.2381+06
CU	.6505+00*	.7734+01*	.6692+01*
PB	.1456+00*	.5423+01*	.4237+02*
MN	.6364-01*	.7204-01*	.1208+00*
TOTAL	.54862+10	.55011+10	.27437+12

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.3486-02*	.3486-02*	.3486-02*
NI	.8883+00*	.3206+05	.3597+06
V	.5463-01*	.8320-01*	.3235+00*
ZN	.1155-01*	.1524+01*	.2364+01*
ZR	.6717-02*	.6717-02*	.6717-02*
AS	.3486-01*	.3486-01*	.8528-01*
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.1229+06	.1603+09
URBAN	.9869+08	.4065+11

TOTAL IMPACT FACTOR = .4081+11
AVERAGE SOURCE IMPACT FACTOR = .2378+08

* RATIO OF MAXIMUN SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 559.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 209 - STOKER F-T BOILER <29 MW FUEL TYPE 14 - BIT/LIG COAL

CONSUMPTION: TOTAL = .5560 (1E15 KJ/YR) SINGLE SOURCE = .2997-04 (1E15 KJ/YR)

FRACTION: RURAL = .590 URBAN = .410

CONTROLS: NOX = .0000 SOX = .0000 PARTICULATES = .1500

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 20.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.9778+00*	.5478+01*	.9478+01*
SOX	.3456+07	.1242+08	.2078+08
HC	.9832-01*	.1601+03*	.1841+03*
CO	.1147-02*	.2501+01*	.4001+01*
PART	.8008+07	.3978+08	.4569+08
SULFAT	.1122-01*	.1425+00*	.2229+00*
POM HI	.1453+07	.4251+07	.6001+07
BA	.8738-01*	.6797+00*	.1171+01*
BE	.3077+10	.3077+10	.1543+12
B	.7463-01*	.7463-01*	.7463-01*
CR	.6967+06	.1276+07	.2400+07
CO	.1776+00*	.1776+00*	.3476+00*
CU	.4029+00*	.7486+01*	.6445+01*
PB	.2654+00*	.5543+01*	.4249+02*
MN	.2179-01*	.3014-01*	.7888-01*
TOTAL	.30934+10	.31406+10	.15434+12

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.3251-02*	.3251-02*	.3251-02*
NI	.4631+00*	.6084+00*	.9002+05
V	.1621+00*	.1907+00*	.4310+00*
ZN	.1273+00*	.1640+01*	.2480+01*
ZR	.1177-01*	.1177-01*	.1177-01*
AS	.6070-01*	.6070-01*	.1111+00*
BI	.0000 *	.0000 *	.0000 *
AL	.1067+07	.6197+07	.1856+07
SB	.0000 *	.0000 *	.0000 *
CD	.4917+00*	.5667+00*	.4959+05
SE	.5679-01*	.5679-01*	.1408+00*
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.7016+05	.9905+09
URBAN	.5552+08	.5171+12

TOTAL IMPACT FACTOR = .5181+12
AVERAGE SOURCE IMPACT FACTOR = .2280+08

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF MEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 559.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 210 - HRT BOILERS <29 MW FUEL TYPE 9 - DISTILLATE OIL

CONSUMPTION: TOTAL = .2630 (1E15 KJ/YR) SINGLE SOURCE = .2589-04 (1E15 KJ/YR)

FRACTION: RURAL = .660 URBAN = .340

CONTROLS: NOX = .0000 SOX = .0000 PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 20.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.3894+00*	.4889+01*	.8889+01*
SOX	.7860+00*	.3911+01*	.7661+01*
HC	.2307-02*	.1800+03*	.1840+03*
CO	.9806-04*	.2500+01*	.4000+01*
PART	.3008-01*	.1070+02*	.1270+02*
SULFAT	.2127-02*	.1334+00*	.2139+00*
POM HI	.1289+08	.3071+08	.4184+08
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.12894+08	.30706+08	.41839+08

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	686.8	.4607+07
URBAN	.1505+05	.5207+08

TOTAL IMPACT FACTOR = .5668+08
AVERAGE SOURCE IMPACT FACTOR = 5570.

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1979 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 859.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 210 - HRT BOILERS <29 MW FUEL TYPE 10 - NATURAL GAS

CONSUMPTION: TOTAL = .5350 (1E15 KJ/YR) FRACTION: RURAL = .900
SINGLE SOURCE = .4008-04 (1E15 KJ/YR) URBAN = .100

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 20.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.8849+00*	.5385+01*	.9385+01*
SOX	.3355-02*	.3126+01*	.6878+01*
HC	.1521-01*	.1800+03*	.1840+03*
CO	.7694-03*	.2501+01*	.4001+01*
PART	.3102-01*	.1070+02*	.1270+02*
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.6069-01*	.4061+01*	.6561+01*
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.00000	.00000	.00000

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000
AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 859.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 210 - HRT BOILERS <29 MW FUEL TYPE 15 - RESIDUAL OIL

CONSUMPTION: TOTAL = .3700 (1E15 KJ/YR) SINGLE SOURCE = .2985-04 (1E15 KJ/YR)

FRACTION: RURAL = .700 URBAN = .300

CONTROLS: NOX = .0000 SOX = .0000 PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 20.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.9625+05	.4787+06	.8167+06
SOX	.1211+07	.3161+07	.5501+07
HC	.5997-02*	.1800+03*	.1840+03*
CO	.2265-03*	.2500+01*	.4000+01*
PART	.7374+00*	.1140+02*	.1340+02*
SULFAT	.1053-01*	.1418+00*	.2225+00*
POM HI	.1619+08	.3862+08	.5264+08
BA	.7817-01*	.6615+00*	.1162+01*
BE	.0000 *	.0000 *	.0000 *
B	.1652-02*	.1652-02*	.1652-02*
CR	.1910+07	.8217+07	.5755+07
CO	.4832+00*	.4832+00*	.6532+00*
CU	.2073+00*	.7291+01*	.6249+01*
PB	.3079+00*	.5586+01*	.4253+02*
MN	.8360-02*	.1676-01*	.6550-01*
TOTAL	.42811+08	.70898+08	.11571+09

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.8360-02*	.8360-02*	.8360-02*
NI	.2022+08	.2219+08	.4676+08
V	.3187+07	.3227+07	.4229+07
ZN	.1314-01*	.1526+01*	.2366+01*
ZR	.2628-02*	.2628-02*	.2628-02*
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.1948+00*	.9877+00*	.1623+01*
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.2389+00*	.2389+00*	.3229+00*
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	1584.	.1374+08
URBAN	.4162+05	.1548+09

TOTAL IMPACT FACTOR = .1685+09
AVERAGE SOURCE IMPACT FACTOR = .1359+05

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 859.7

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 211 - RES/COMM STEAM & HOT WAT FUEL TYPE 1 - ANTHRACITE

CONSUMPTION: TOTAL = .1400-01 (1E15 KJ/YR)
SINGLE SOURCE = .2025-06 (1E15 KJ/YR)

FRACTION: RURAL = .760
URBAN = .240

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

DISTRIBUTED SOURCE
WIDTH = .7944+05 LENGTH = .7944+05

POLLUTANT	NATURAL		RURAL		URBAN	
NOX	.2770-06	*	.4500+01	*	.8500+01	*
SOX	.6778-06	*	.3125+01	*	.6875+01	*
HC	.4743-06	*	.1800+03	*	.1840+03	*
CO	.2132-08	*	.2500+01	*	.4000+01	*
PART	.6323-06	*	.1067+02	*	.1267+02	*
SULFAT	.8950-09	*	.1312+00	*	.2117+00	*
POM HI	.0000	*	.0000	*	.0000	*
BA	.0000	*	.0000	*	.0000	*
BE	.0000	*	.0000	*	.0000	*
B	.0000	*	.0000	*	.0000	*
CR	.0000	*	.0000	*	.0000	*
CO	.0000	*	.0000	*	.0000	*
CU	.0000	*	.0000	*	.0000	*
PB	.0000	*	.0000	*	.0000	*
MN	.0000	*	.0000	*	.0000	*
TOTAL	.00000		.00000		.00000	

POLLUTANT	NATURAL		RURAL		URBAN	
HG	.0000	*	.0000	*	.0000	*
MO	.0000	*	.0000	*	.0000	*
NI	.0000	*	.0000	*	.0000	*
V	.0000	*	.0000	*	.0000	*
ZN	.0000	*	.0000	*	.0000	*
ZR	.0000	*	.0000	*	.0000	*
AS	.0000	*	.0000	*	.0000	*
BI	.0000	*	.0000	*	.0000	*
AL	.0000	*	.0000	*	.0000	*
SB	.0000	*	.0000	*	.0000	*
CD	.0000	*	.0000	*	.0000	*
SE	.0000	*	.0000	*	.0000	*
P	.0000	*	.0000	*	.0000	*
SR	.0000	*	.0000	*	.0000	*

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000
AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) 1974 -- IMPACT PARAMETERS RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 211 - RES/COMM STEAM + HOT WAT FUEL TYPE 9 - DISTILLATE OIL

CONSUMPTION: TOTAL = .6800 (1E15 KJ/YR)
SINGLE SOURCE = .2025-06 (1E15 KJ/YR)

FRACTION: RURAL = .600
URBAN = .400

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

DISTRIBUTED SOURCE
WIDTH = .7944+05 LENGTH = .7944+05

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.8997-07*	.4500+01*	.8500+01*
SOX	.2095-06*	.3125+01*	.6875+01*
HC	.7307-08*	.1800+03*	.1840+03*
CO	.4712-09*	.2500+01*	.4000+01*
PART	.1586-07*	.1067+02*	.1267+02*
SULFAT	.5695-09*	.1312+00*	.2117+00*
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.00000	.00000	.00000

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000
AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 859.7

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 211 - RES/COMM STEAM + HOT WAT FUEL TYPE 10 - NATURAL GAS

CONSUMPTION: TOTAL = .7370 (1E15 KJ/YR) SINGLE SOURCE = .1079-06 (1E15 KJ/YR)

FRACTION: RURAL = .700 URBAN = .300

CONTROLS: NOX = .0000 SOX = .0000 PARTICULATES = .0000

DISTRIBUTED SOURCE

WIDTH = .7944+05 LENGTH = .7944+05

POLLUTANT	NATURAL		RURAL		URBAN	
NOX	.2831-07	*	.4500+01	*	.8500+01	*
SOX	.0000	*	.0000	*	.0000	*
HC	.2799-06	*	.1600+03	*	.1840+03	*
CO	.7079-10	*	.2500+01	*	.4000+01	*
PART	.4719-08	*	.1067+02	*	.1267+02	*
SULFAT	.0000	*	.0000	*	.0000	*
POM HI	.0000	*	.0000	*	.0000	*
BA	.0000	*	.0000	*	.0000	*
BE	.0000	*	.0000	*	.0000	*
B	.0000	*	.0000	*	.0000	*
CR	.0000	*	.0000	*	.0000	*
CO	.0000	*	.0000	*	.0000	*
CU	.0000	*	.0000	*	.0000	*
PB	.0000	*	.0000	*	.0000	*
MN	.0000	*	.0000	*	.0000	*
TOTAL	.00000		.00000		.00000	

POLLUTANT	NATURAL		RURAL		URBAN	
HG	.0000	*	.0000	*	.0000	*
MO	.0000	*	.0000	*	.0000	*
NI	.0000	*	.0000	*	.0000	*
V	.0000	*	.0000	*	.0000	*
ZN	.0000	*	.0000	*	.0000	*
ZR	.0000	*	.0000	*	.0000	*
AS	.0000	*	.0000	*	.0000	*
BI	.0000	*	.0000	*	.0000	*
AL	.0000	*	.0000	*	.0000	*
SB	.0000	*	.0000	*	.0000	*
CD	.0000	*	.0000	*	.0000	*
SE	.0000	*	.0000	*	.0000	*
P	.0000	*	.0000	*	.0000	*
SR	.0000	*	.0000	*	.0000	*

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000

AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1979 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 559.7

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 211 - RES/COMM STEAM + HOT WAT FUEL TYPE 14 - BIT/LIG COAL

CONSUMPTION: TOTAL = .1100-01 (1E15 KJ/YR) SINGLE SOURCE = .2025-06 (1E15 KJ/YR)

FRACTION: RURAL = .590 URBAN = .410

CONTROLS: NOX = .0000 SOX = .0000 PARTICULATES = .0000

DISTRIBUTED SOURCE

WIDTH = .7944+05 LENGTH = .7944+05

POLLUTANT	NATURAL	RURAL	URBAN	POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2770-06*	.4500+01*	.8500+01*	HG	.0000 *	.0000 *	.0000 *
SOX	.2865-05*	.3125+01*	.6875+01*	MO	.0000 *	.0000 *	.0000 *
HC	.5534-06*	.1800+03*	.1840+03*	NI	.0000 *	.0000 *	.0000 *
CO	.2491-07*	.2500+01*	.4000+01*	V	.0000 *	.0000 *	.0000 *
PART	.7378-06*	.1067+02*	.1267+02*	ZN	.3600-07*	.1513+01*	.2353+01*
SULFAT	.3173-08*	.1312+00*	.2117+00*	ZR	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *	AS	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *	BI	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *	AL	.1067-05*	.7937+00*	.1429+01*
B	.0000 *	.0000 *	.0000 *	SB	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *	CD	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *	SE	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *	P	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *	SR	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *				
TOTAL	.00000	.00000	.00000				

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000

AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF MEG

TABLE F-1. Continued

1979 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 359.7

SECTOR 2 - PACKAGED BOILERS EQUIP TYPE 211 - RES/COMM STEAM + HOT WAT FUEL TYPE 15 - RESIDUAL OIL

CONSUMPTION: TOTAL = .6980-01 (1E15 KJ/YR) FRACTION: RURAL = .600 CONTROLS: NOX = .0000
SINGLE SOURCE = .2025-06 (1E15 KJ/YR) URBAN = .400 SOX = .0000
PARTICULATES = .0000

DISTRIBUTED SOURCE
WIDTH = .7944+05 LENGTH = .7944+05

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2503-06*	.4500+01*	.8500+01*
SOX	.9288-06*	.3125+01*	.6875+01*
HC	.4650-06*	.1800+03*	.1840+03*
CO	.2391-09*	.2500+01*	.4000+01*
PART	.1718-06*	.1067+02*	.1267+02*
SULFAT	.2441-08*	.1312+00*	.2117+00*
POR HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.00000	.00000	.00000

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.5633-05*	.1453+00*	.6410+00*
V	.1661-05*	.2857-01*	.2689+00*
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.4498-07*	.7937+00*	.1429+01*
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000
AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 359.7

SECTOR 3 - WARM AIR FURNACES EQUIP TYPE 301 - WARM AIR CENTRAL FURNACE FUEL TYPE 10 - NATURAL GAS

CONSUMPTION: TOTAL = 3.091 (1E15 KJ/YR) SINGLE SOURCE = .1079-06 (1E15 KJ/YR)

FRACTION: RURAL = .700 URBAN = .300

CONTROLS: NOX = .0000 SOX = .0000 PARTICULATES = .0000

DISTRIBUTED SOURCE

WIDTH = .7944+05 LENGTH = .7944+05

POLLUTANT	NATURAL		RURAL		URBAN	
NOX	.2831-07	*	.4500+01	*	.8500+01	*
SOX	.0000	*	.0000	*	.0000	*
HC	.2799-08	*	.1800+03	*	.1840+03	*
CO	.9877-10	*	.2500+01	*	.4000+01	*
PART	.4719-08	*	.1067+02	*	.1267+02	*
SULFAT	.0000	*	.0000	*	.0000	*
POM HI	.0000	*	.0000	*	.0000	*
BA	.0000	*	.0000	*	.0000	*
BE	.0000	*	.0000	*	.0000	*
B	.0000	*	.0000	*	.0000	*
CR	.0000	*	.0000	*	.0000	*
CD	.0000	*	.0000	*	.0000	*
CU	.0000	*	.0000	*	.0000	*
PB	.0000	*	.0000	*	.0000	*
MN	.0000	*	.0000	*	.0000	*
TOTAL	.00000		.00000		.00000	

POLLUTANT	NATURAL		RURAL		URBAN	
HG	.0000	*	.0000	*	.0000	*
MO	.0000	*	.0000	*	.0000	*
NI	.0000	*	.0000	*	.0000	*
V	.0000	*	.0000	*	.0000	*
ZN	.0000	*	.0000	*	.0000	*
ZR	.0000	*	.0000	*	.0000	*
AS	.0000	*	.0000	*	.0000	*
BI	.0000	*	.0000	*	.0000	*
AL	.0000	*	.0000	*	.0000	*
SB	.0000	*	.0000	*	.0000	*
CD	.0000	*	.0000	*	.0000	*
SE	.0000	*	.0000	*	.0000	*
P	.0000	*	.0000	*	.0000	*
SR	.0000	*	.0000	*	.0000	*

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000

AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1988. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 859.7

SECTOR 3 - WARM AIR FURNACES EQUIP TYPE 301 - WARM AIR CENTRAL FURNACE FUEL TYPE 16 - OIL

CONSUMPTION: TOTAL = 1.485 (1E15 KJ/YR) FRACTION: RURAL = .600 CONTROLS: NOX = .0000
SINGLE SOURCE = .2025-06 (1E15 KJ/YR) URBAN = .400 SOX = .0000
PARTICULATES = .0000

DISTRIBUTED SOURCE
WIDTH = .7944+05 LENGTH = .7944+05

POLLUTANT	NATURAL	RURAL	URBAN	POLLUTANT	NATURAL	RURAL	URBAN
NOX	.9423-07*	.4500+01*	.6500+01*	HG	.0000 *	.0000 *	.0000 *
SOX	.2095-06*	.3125+01*	.6875+01*	MO	.0000 *	.0000 *	.0000 *
HC	.7261-08*	.1800+03*	.1840+03*	NI	.0000 *	.0000 *	.0000 *
CO	.4789-09*	.2500+01*	.4000+01*	V	.0000 *	.0000 *	.0000 *
PART	.1586-07*	.1067+02*	.1267+02*	ZN	.0000 *	.0000 *	.0000 *
SULFAT	.5695-09*	.1312+00*	.2117+00*	ZR	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *	AS	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *	BI	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *	AL	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *	SB	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *	CD	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *	SE	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *	P	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *	SR	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *				
TOTAL	.00000	.00000	.00000				

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000
AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF MEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 959.7

SECTOR 3 - WARM AIR FURNACES EQUIP TYPE 302 - WARM AIR SPACE HEATER FUEL TYPE 10 - NATURAL GAS

CONSUMPTION: TOTAL = 1.451 (1E15 KJ/YR) FRACTION: RURAL = .700 CONTROLS: NOX = .0000
SINGLE SOURCE = .1079-06 (1E15 KJ/YR) URBAN = .300 SOX = .0000
PARTICULATES = .0000

DISTRIBUTED SOURCE
WIDTH = .7944+05 LENGTH = .7944+05

POLLUTANT	NATURAL	RURAL	URBAN	POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2831-07*	.4500+01*	.8500+01*	HG	.0000 *	.0000 *	.0000 *
SOX	.0000 *	.0000 *	.0000 *	MO	.0000 *	.0000 *	.0000 *
HC	.2799-08*	.1800+03*	.1840+03*	NI	.0000 *	.0000 *	.0000 *
CO	.9877-10*	.2500+01*	.4000+01*	V	.0000 *	.0000 *	.0000 *
PART	.4719-08*	.1867+02*	.1267+02*	ZN	.0000 *	.0000 *	.0000 *
SULFAT	.0000 *	.0000 *	.0000 *	ZR	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *	AS	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *	BI	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *	AL	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *	SB	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *	CD	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *	SE	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *	P	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *	SR	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *				
TOTAL	.00000	.00000	.00000				

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000
AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 339.7 (P/KM2)

SECTOR 5 - WARM AIR FURNACES EQUIP TYPE 302 - WARM AIR SPACE HEATER FUEL TYPE 16 - OIL

CONSUMPTION: TOTAL = .7270 (1E15 KJ/YR)
SINGLE SOURCE = .2025-06 (1E15 KJ/YR)

FRACTION: RURAL = .600
URBAN = .400

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

DISTRIBUTED SOURCE
WIDTH = .7944+05 LENGTH = .7944+05

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.9823-07*	.4500+01*	.6500+01*
SOX	.2095-06*	.3125+01*	.6875+01*
HC	.7261-08*	.1800+03*	.1840+03*
CO	.4789-09*	.2500+01*	.4000+01*
PART	.1586-07*	.1067+02*	.1267+02*
SULFAT	.5695-09*	.1312+00*	.2117+00*
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.00000	.00000	.00000

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000
AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 859.7 (P/KM2)

SECTOR 8 - WARM AIR FURNACES EQUIP TYPE 303 - MISCELLANEOUS COMBUSTION FUEL TYPE 10 - NATURAL GAS

CONSUMPTION: TOTAL = 1.0000 (1E15 KJ/YR) SINGLE SOURCE = .1079-06 (1E15 KJ/YR)

FRACTIONS: RURAL = .700 URBAN = .300

CONTROLS: NOX = .0000 SOX = .0000 PARTICULATES = .0000

DISTRIBUTED SOURCE

WIDTH = .7944+05 LENGTH = .7944+05

POLLUTANT	NATURAL		RURAL		URBAN		POLLUTANT	NATURAL		RURAL		URBAN	
NOX	.2831-07	*	.4500+01	*	.8500+01	*	HG	.0000	*	.0000	*	.0000	*
SOX	.0000	*	.0000	*	.0000	*	MO	.0000	*	.0000	*	.0000	*
HC	.2799-08	*	.1800+03	*	.1840+03	*	NI	.0000	*	.0000	*	.0000	*
CO	.9877-10	*	.2500+01	*	.4000+01	*	V	.0000	*	.0000	*	.0000	*
PART	.4719-08	*	.1067+02	*	.1267+02	*	ZN	.0000	*	.0000	*	.0000	*
SULFAT	.0000	*	.0000	*	.0000	*	ZR	.0000	*	.0000	*	.0000	*
POM HI	.0000	*	.0000	*	.0000	*	AS	.0000	*	.0000	*	.0000	*
BA	.0000	*	.0000	*	.0000	*	BI	.0000	*	.0000	*	.0000	*
BE	.0000	*	.0000	*	.0000	*	AL	.0000	*	.0000	*	.0000	*
B	.0000	*	.0000	*	.0000	*	SB	.0000	*	.0000	*	.0000	*
CR	.0000	*	.0000	*	.0000	*	CD	.0000	*	.0000	*	.0000	*
CO	.0000	*	.0000	*	.0000	*	SE	.0000	*	.0000	*	.0000	*
CU	.0000	*	.0000	*	.0000	*	P	.0000	*	.0000	*	.0000	*
PB	.0000	*	.0000	*	.0000	*	SR	.0000	*	.0000	*	.0000	*
MN	.0000	*	.0000	*	.0000	*							
TOTAL	.00000		.00000		.00000								

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000

AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

INVERSION HEIGHT = 1500. (M)

1974 -- IMPACT PARAMETERS

WIND SPEED = 4.500 (M/S)

RURAL POP. = 22.34 (P/KM2)

URBAN POPL. = 559.7 (P/KM2)

SECTOR 4 - GAS TURBINES

EQUIP TYPE 401 - SIMPLE CYCLE >15 MW

FUEL TYPE 9 - DISTILLATE OIL

CONSUMPTION: TOTAL = .2640 (1E15 KJ/YR)
SINGLE SOURCE = .9675-03 (1E15 KJ/YR)

FRACTION: RURAL = .490
URBAN = .510

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 10.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.1236+09	.2656+09	.3916+09
SOX	.1225+07	.2615+07	.4282+07
HC	.6236+06	.4556+08	.4658+08
CO	.4304+08*	.2930+01*	.4430+01*
PART	.2914+07	.1086+08	.1245+08
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.12782+09	.32962+09	.45509+09

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	7252.	.9698+06
URBAN	.1637+06	.2279+08

TOTAL IMPACT FACTOR = .2376+08
AVERAGE SOURCE IMPACT FACTOR = .8704+05

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

INVERSION HEIGHT = 1500. (M)

1976 -- IMPACT PARAMETERS

WIND SPEED = 4.500 (M/S)

RURAL POP. = 22.34 (P/KM2)

URBAN POPL. = 859.7 (P/KM2)

SECTOR 4 - GAS TURBINES

EQUIP TYPE 401 - SIMPLE CYCLE >15 MW

FUEL TYPE 10 - NATURAL GAS

CONSUMPTION: TOTAL = .2120 (1E15 KJ/YR)
SINGLE SOURCE = .9673-03 (1E15 KJ/YR)

FRACTION: RURAL = .292
URBAN = .708

CONTROLS: NOX % = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 10.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.5295+08	.1164+09	.1728+09
SOX	.9789+05	.2903+06	.5212+06
HC	.6236+06	.4558+08	.4658+08
CO	.4487+00*	.2949+01*	.4949+01*
PART	.5794+06	.3236+07	.3734+07
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.54255+08	.16549+09	.22360+09

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	3697.	.2366+06
URBAN	.8043+05	.1248+08

TOTAL IMPACT FACTOR = .1272+08
AVERAGE SOURCE IMPACT FACTOR = .5802+05

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1979 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 4 - GAS TURBINES EQUIP TYPE 404 - SIMPLE CYCLE 4 TO 15 MW FUEL TYPE 9 - DISTILLATE OIL

CONSUMPTION: TOTAL = .5790 (1E15 KJ/YR)
SINGLE SOURCE = .5274-03 (1E15 KJ/YR)

FRACTION: RURAL = .550
URBAN = .450

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

DISTRIBUTED SOURCE
WIDTH = .7944+05 LENGTH = .7944+05

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.1468-02*	.4501+01*	.8501+01*
SOX	.5381-04*	.3125+01*	.6075+01*
HC	.3983-04*	.1800+03*	.1040+03*
CO	.1903-05*	.2500+01*	.4000+01*
PART	.8314-04*	.1067+02*	.1267+02*
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.00000	.00000	.00000

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000
AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF MEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1900. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 859.7

SECTOR 9 - GAS TURBINES EQUIP TYPE 904 - SIMPLE CYCLE 4 TO 15 MW FUEL TYPE 10 - NATURAL GAS

CONSUMPTION: TOTAL = .9680 (1E15 KJ/YR)
SINGLE SOURCE = .5274-03 (1E15 KJ/YR)

FRACTION: RURAL = .700
URBAN = .300

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

DISTRIBUTED SOURCE

WIDTH = .7944+05 LENGTH = .7944+05

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.7805-03*	.9501+01*	.8501+01*
SOX	.1106-04*	.3125+01*	.6875+01*
HC	.5299-04*	.1800+03*	.1840+03*
CO	.1987-05*	.2500+01*	.4000+01*
PART	.3218-04*	.1067+02*	.1267+02*
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CC	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.00000	.00000	.00000

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000
AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 339.7 (P/KM2)

SECTOR 4 - GAS TURBINES EQUIP TYPE 406 - SIMPLE CYCLE <4 MW FUEL TYPE 9 - DISTILLATE OIL

CONSUMPTION: TOTAL = .1000-02 (1E15 KJ/YR) FRACTION: RURAL = .550 CONTROLS: NOX = .0000
SINGLE SOURCE = .3164-05 (1E15 KJ/YR) URBAN = .450 SOX = .0000
PARTICULATES = .0000

DISTRIBUTED SOURCE
WIDTH = .7944+05 LENGTH = .7944+05

POLLUTANT	NATURAL	RURAL	URBAN	POLLUTANT	NATURAL	RURAL	URBAN
NOX	.6810-05*	.4500+01*	.8500+01*	HG	.0000 *	.0000 *	.0000 *
SOX	.5228-06*	.3125+01*	.6875+01*	MO	.0000 *	.0000 *	.0000 *
HC	.2390-06*	.1880+03*	.1840+03*	NI	.0000 *	.0000 *	.0000 *
CO	.1142-07*	.2500+01*	.4000+01*	V	.0000 *	.0000 *	.0000 *
PART	.4988-06*	.1667+02*	.1267+02*	ZN	.0000 *	.0000 *	.0000 *
SULFAT	.0000 *	.0000 *	.0000 *	ZR	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *	AS	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *	BI	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *	AL	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *	SN	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *	CD	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *	SE	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *	P	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *	SR	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *				
TOTAL	.00000	.00000	.00000				

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000
AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF MEG

TABLE F-1. Continued

1979 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 559.7

SECTOR 4 - GAS TURBINES EQUIP TYPE 906 - SIMPLE CYCLE <4 MW FUEL TYPE 10 - NATURAL GAS

CONSUMPTION: TOTAL = .1000-02 (1E15 KJ/YR) SINGLE SOURCE = .3164-05 (1E15 KJ/YR)

FRACTION: RURAL = .700 URBAN = .300

CONTROLS: NOX = .0000 SOX = .0000 PARTICULATES = .0000

DISTRIBUTED SOURCE WIDTH = .7944+05 LENGTH = .7944+05

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.4683-05*	.4500+01*	.6500+01*
SOX	.6638-07*	.3125+01*	.6875+01*
HC	.1979-06*	.1800+03*	.1840+03*
CO	.1192-07*	.2500+01*	.4000+01*
PART	.1931-06*	.1067+02*	.1267+02*
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.00000	.00000	.00000

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000

AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 16% OF NES

TABLE F-1. Continued

1979 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.54 (P/KM2) URBAN POPL. = 559.7 (P/KM2)

SECTOR 5 - RECIPROCATING I/C ENGINE EQUIP TYPE 501 - C. I. >75 KW/CYL FUEL TYPE 9 - DISTILLATE OIL

CONSUMPTION: TOTAL = .5488-01 (1E15 KJ/YR) FRACTION: RURAL = .800
SINGLE SOURCE = .1717-04 (1E15 KJ/YR) URBAN = .200

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 10.00 (M)

POLLUTANT	NATURAL		RURAL		URBAN	
NOX	.4898+07		.9790+07		.1476+08	
SOX	.5468+05		.1712+06		.3111+06	
HC	.5246+05		.6766+07		.6915+07	
CO	.5089-01	*	.2551+01	*	.4051+01	*
PART	.7163+05		.5569+06		.6478+06	
SULFAT	.0000	*	.0000	*	.0000	*
POM HI	.0000	*	.0000	*	.0000	*
BA	.0000	*	.0000	*	.0000	*
BE	.0000	*	.0000	*	.0000	*
B	.0000	*	.0000	*	.0000	*
CR	.0000	*	.0000	*	.0000	*
CO	.0000	*	.0000	*	.0000	*
CU	.0000	*	.0000	*	.0000	*
PB	.0000	*	.0000	*	.0000	*
MN	.0000	*	.0000	*	.0000	*
TOTAL	.42692+07		.17234+08		.22636+08	

POLLUTANT	NATURAL		RURAL		URBAN	
HG	.0000	*	.0000	*	.0000	*
MO	.0000	*	.0000	*	.0000	*
NI	.0000	*	.0000	*	.0000	*
V	.0000	*	.0000	*	.0000	*
ZN	.0000	*	.0000	*	.0000	*
ZR	.0000	*	.0000	*	.0000	*
AS	.0000	*	.0000	*	.0000	*
BI	.0000	*	.0000	*	.0000	*
AL	.0000	*	.0000	*	.0000	*
SB	.0000	*	.0000	*	.0000	*
CD	.0000	*	.0000	*	.0000	*
SE	.0000	*	.0000	*	.0000	*
P	.0000	*	.0000	*	.0000	*
SR	.0000	*	.0000	*	.0000	*

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	385.0	.9685+06
URBAN	8143.	.5121+07

TOTAL IMPACT FACTOR = .6089+07
AVERAGE SOURCE IMPACT FACTOR = 1937.

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 18% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 559.7

SECTOR 3 - RECIPROCATING I/C ENGINE EQUIP TYPE 301 - C. I. >375 KW/CYL FUEL TYPE 17 - DUAL (OIL + GAS)

CONSUMPTION: TOTAL = .7000-01 (1E15 KJ/YR) FRACTION: RURAL = .800
SINGLE SOURCE = .1717-04 (1E15 KJ/YR) URBAN = .200

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 10.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.1973+07	.5147+07	.7968+07
SOX	.0000 *	.0000 *	.0000 *
HC	.5087+06	.4098+08	.4136+08
CO	.2230-01*	.2522+01*	.4022+01*
PART	.0000 *	.0000 *	.0000 *
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.24817+07	.45622+08	.49332+08

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	1019.	.3324+07
URBAN	.1775+05	.1447+08

TOTAL IMPACT FACTOR = .1779+08
AVERAGE SOURCE IMPACT FACTOR = 4364.

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) 1974 -- IMPACT PARAMETERS RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 5 - RECIPROCATING I/C ENGINE EQUIP TYPE 502 - S. I. >75 KW/CYL FUEL TYPE 10 - NATURAL GAS

CONSUMPTION: TOTAL = .6130 (1E15 KJ/YR)
SINGLE SOURCE = .1717-04 (1E15 KJ/YR)

FRACTION: RURAL = .850
URBAN = .150

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 10.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.3569+07	.6542+07	.1302+08
SOX	.4471-02*	.3129+01*	.6879+01*
HC	.7684+06	.5419+06	.5538+06
CO	.2878-01*	.2529+01*	.4029+01*
PART	.0000 *	.0000 *	.0000 *
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.42775+07	.62733+06	.68394+06

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	1901.	.5648+08
URBAN	.2960+05	.1747+09

TOTAL IMPACT FACTOR = .2311+09
AVERAGE SOURCE IMPACT FACTOR = 4882.

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 359.7

SECTOR 5 - RECIPROCATING I/C ENGINE EQUIP TYPE 503 - C. I. 75 KW TO 75 KW/CYL FUEL TYPE 9 - DISTILLATE OIL

CONSUMPTION: TOTAL = .1298 (1E15 KJ/YR)
SINGLE SOURCE = .1207-05 (1E15 KJ/YR)

FRACTION: RURAL = .850
URBAN = .150

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

DISTRIBUTED SOURCE

WIDTH = .7944+05 LENGTH = .7944+05

POLLUTANT	NATURAL		RURAL		URBAN	
NOX	.1603-04	*	.4500+01	*	.6500+01	*
SOX	.1103-05	*	.3125+01	*	.6875+01	*
HC	.1059-05	*	.1800+03	*	.1840+03	*
CO	.2881-07	*	.2500+01	*	.4000+01	*
PART	.1269-05	*	.1067+02	*	.1267+02	*
SULFAT	.0000	*	.0000	*	.0000	*
POM HI	.0000	*	.0000	*	.0000	*
BA	.0000	*	.0000	*	.0000	*
BE	.0000	*	.0000	*	.0000	*
B	.0000	*	.0000	*	.0000	*
CR	.0000	*	.0000	*	.0000	*
CD	.0000	*	.0000	*	.0000	*
CU	.0000	*	.0000	*	.0000	*
PB	.0000	*	.0000	*	.0000	*
MN	.0000	*	.0000	*	.0000	*
TOTAL	.00000		.00000		.00000	

POLLUTANT	NATURAL		RURAL		URBAN	
HG	.0000	*	.0000	*	.0000	*
MO	.0000	*	.0000	*	.0000	*
NI	.0000	*	.0000	*	.0000	*
V	.0000	*	.0000	*	.0000	*
ZN	.0000	*	.0000	*	.0000	*
ZR	.0000	*	.0000	*	.0000	*
AS	.0000	*	.0000	*	.0000	*
BI	.0000	*	.0000	*	.0000	*
AL	.0000	*	.0000	*	.0000	*
SB	.0000	*	.0000	*	.0000	*
CD	.0000	*	.0000	*	.0000	*
SE	.0000	*	.0000	*	.0000	*
P	.0000	*	.0000	*	.0000	*
SR	.0000	*	.0000	*	.0000	*

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000
AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 359.7

SECTOR 5 - RECIPROCATING I/C ENGINE EQUIP TYPE 504 - S. I. 75 KW TO 75 KW/CYL FUEL TYPE 10 - NATURAL GAS

CONSUMPTION: TOTAL = .4300-01 (1E15 KJ/YR)
SINGLE SOURCE = .1207-05 (1E15 KJ/YR)

FRACTION: RURAL = .500
URBAN = .500

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

DISTRIBUTED SOURCE
WIDTH = .7944+05 LENGTH = .7944+05

POLLUTANT	NATURAL		RURAL		URBAN	
NOX	.1429-04	*	.4500+01	*	.8500+01	*
SOX	.0000	*	.0000	*	.0000	*
HC	.5109-05	*	.1800+03	*	.1840+03	*
CO	.1629-07	*	.2500+01	*	.4000+01	*
PART	.0000	*	.0000	*	.0000	*
SULFAT	.0000	*	.0000	*	.0000	*
POM HI	.0000	*	.0000	*	.0000	*
BA	.0000	*	.0000	*	.0000	*
BE	.0000	*	.0000	*	.0000	*
B	.0000	*	.0000	*	.0000	*
CR	.0000	*	.0000	*	.0000	*
CO	.0000	*	.0000	*	.0000	*
CU	.0000	*	.0000	*	.0000	*
PB	.0000	*	.0000	*	.0000	*
MN	.0000	*	.0000	*	.0000	*
TOTAL	.00000		.00000		.00000	

POLLUTANT	NATURAL		RURAL		URBAN	
HG	.0000	*	.0000	*	.0000	*
MO	.0000	*	.0000	*	.0000	*
NI	.0000	*	.0000	*	.0000	*
V	.0000	*	.0000	*	.0000	*
ZN	.0000	*	.0000	*	.0000	*
ZR	.0000	*	.0000	*	.0000	*
AS	.0000	*	.0000	*	.0000	*
BI	.0000	*	.0000	*	.0000	*
AL	.0000	*	.0000	*	.0000	*
SB	.0000	*	.0000	*	.0000	*
CD	.0000	*	.0000	*	.0000	*
SE	.0000	*	.0000	*	.0000	*
P	.0000	*	.0000	*	.0000	*
SR	.0000	*	.0000	*	.0000	*

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000
AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 9.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 5 - RECIPROCATING I/C ENGINE EQUIP TYPE 504 - S. I. 75 KW TO 75 KW/CYL FUEL TYPE 12 - GASOLINE

CONSUMPTION: TOTAL = .8400-01 (1E15 KJ/YR)
SINGLE SOURCE = .1207-05 (1E15 KJ/YR)

FRACTION: RURAL = .500
URBAN = .500

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

DISTRIBUTED SOURCE

WIDTH = .7944+05 LENGTH = .7944+05

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.1100-04*	.4500+01*	.6500+01*
SOX	.1875-06*	.3125+01*	.6875+01*
HC	.3728-05*	.1800+03*	.1840+03*
CO	.1112-05*	.2500+01*	.4000+01*
PART	.2430-06*	.1067+02*	.1267+02*
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.00000	.00000	.00000

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000
AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF MEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 5 - RECIPROCATING I/C ENGINE EQUIP TYPE 506 - S. I. <75 KW FUEL TYPE 12 - GASOLINE

CONSUMPTION: TOTAL = .4980-01 (1E15 KJ/YR)
SINGLE SOURCE = .2816-08 (1E15 KJ/YR)

FRACTION: RURAL = .850
URBAN = .150

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

DISTRIBUTED SOURCE

WIDTH = .7944+05 LENGTH = .7944+05

POLLUTANT	NATURAL		RURAL		URBAN	
NOX	.1663-07	*	.4500+01	*	.8500+01	*
SOX	.0000	*	.0000	*	.0000	*
HC	.8700-08	*	.1800+03	*	.1840+03	*
CO	.2595-08	*	.2500+01	*	.4000+01	*
PART	.0000	*	.0000	*	.0000	*
SULFAT	.0000	*	.0000	*	.0000	*
POM HI	.0000	*	.0000	*	.0000	*
BA	.0000	*	.0000	*	.0000	*
BE	.0000	*	.0000	*	.0000	*
B	.0000	*	.0000	*	.0000	*
CR	.0000	*	.0000	*	.0000	*
CD	.0000	*	.0000	*	.0000	*
CU	.0000	*	.0000	*	.0000	*
PB	.0000	*	.0000	*	.0000	*
MN	.0000	*	.0000	*	.0000	*
TOTAL	.00000		.00000		.00000	

POLLUTANT	NATURAL		RURAL		URBAN	
HG	.0000	*	.0000	*	.0000	*
MO	.0000	*	.0000	*	.0000	*
NI	.0000	*	.0000	*	.0000	*
V	.0000	*	.0000	*	.0000	*
ZN	.0000	*	.0000	*	.0000	*
ZR	.0000	*	.0000	*	.0000	*
AS	.0000	*	.0000	*	.0000	*
BI	.0000	*	.0000	*	.0000	*
AL	.0000	*	.0000	*	.0000	*
SB	.0000	*	.0000	*	.0000	*
CD	.0000	*	.0000	*	.0000	*
SE	.0000	*	.0000	*	.0000	*
P	.0000	*	.0000	*	.0000	*
SR	.0000	*	.0000	*	.0000	*

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000
AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 9.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 559.7

SECTOR 6 - IND. PROCESS COMBUSTION EQUIP TYPE 601 - CEMENT KILNS FUEL TYPE 13 - PROCESSED MAT'L

CONSUMPTION: TOTAL = .7296+08 Mg
SINGLE SOURCE = .3330+04 Mg

FRACTION: RURAL = .450
URBAN = .550

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .8800

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 25.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.6416+08*	.5142+01*	.9142+01*
SOX	.1328+07	.3632+07	.6397+07
HC	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
PART	.8760+07	.4643+08	.5350+08
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.10088+08	.50067+08	.59896+08

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	1118.	.1103+07
URBAN	.2155+05	.2596+08

TOTAL IMPACT FACTOR = .2707+08
AVERAGE SOURCE IMPACT FACTOR = .1235+05

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF REG

TABLE F-1. Continued

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) 1974 -- IMPACT PARAMETERS RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 859.7 (P/KM2)

SECTOR 6 - IND. PROCESS COMBUSTION EQUIP TYPE 602 - GLASS MELTING FURNACES FUEL TYPE 18 - PROCESSED MAT'L

CONSUMPTION: TOTAL = .1462+08 Mg
SINGLE SOURCE = .5400+03 Mg

FRACTION: RURAL = .150
URBAN = .850

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 55.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.5356-01*	.4554+01*	.8554+01*
SOX	.3857-01*	.3164+01*	.6914+01*
HC	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
PART	.1940-01*	.1069+02*	.1269+02*
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.00000	.00000	.00000

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000
AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF REG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 559.7 (P/KM2)

SECTOR 6 - IND. PROCESS COMBUSTION EQUIP TYPE 603 - GLASS ANNEALING LEHRS FUEL TYPE 13 - PROCESSED MAT'L

CONSUMPTION: TOTAL = .1462+08 Mg
SINGLE SOURCE = .1020+03 Mg

FRACTION: RURAL = .150
URBAN = .850

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 55.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.1897-02*	.4502+01*	.8502+01*
SOX	.0000 *	.0000 *	.0000 *
HC	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
PART	.0000 *	.0000 *	.0000 *
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.00000	.00000	.00000

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000
AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NES

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 339.7 (P/KM2)

SECTOR 6 - IND. PROCESS COMBUSTION EQUIP TYPE 604 - COKE OVEN UNDERFIRE FUEL TYPE 13 - PROCESSED MAT'L

CONSUMPTION: TOTAL = .5405+08 Mg
SINGLE SOURCE = .3640+04 Mg

FRACTION: RURAL = .800
URBAN = .200

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 30.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2555-01*	.4526+01*	.8526+01*
SOX	.2782+06	.1018+07	.1905+07
HC	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
PART	.3868+08	.1889+09	.2171+09
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.38968+08	.18996+09	.21903+09

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	9299.	.5041+08
URBAN	.7879+05	.2340+09

TOTAL IMPACT FACTOR = .2844+09
AVERAGE SOURCE IMPACT FACTOR = .1915+05

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF REG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 6 - IND. PROCESS COMBUSTION

EQUIP TYPE 605 - STEEL SINTERING MACHINES

FUEL TYPE 13 - PROCESSED MAT'L

CONSUMPTION: TOTAL = .4599+08 Mg
SINGLE SOURCE = .1720+04 Mg

FRACTION: RURAL = .550
URBAN = .450

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 45.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.3751-01*	.4536+01*	.6538+01*
SOX	.6402-01*	.3189+01*	.6939+01*
HC	.0000 *	.0000 *	.0000 *
CO	.1587-01*	.2516+01*	.4016+01*
PART	.9618+00*	.1163+02*	.1363+02*
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.00000	.00000	.00000

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000
AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF MEB

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 6 - IND. PROCESS COMBUSTION EQUIP TYPE 606 - OPEN HEARTH FURNCE (OIL) FUEL TYPE 15 - PROCESSED MAT'L

CONSUMPTION: TOTAL = .3059+08 Mg
SINGLE SOURCE = .4090+04 Mg

FRACTION: RURAL = .550
URBAN = .450

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 45.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.1063+00*	.4606+01*	.8606+01*
SOX	.1501+00*	.3275+01*	.7025+01*
HC	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
PART	.1071+07	.1072+08	.1253+08
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.10713+07	.10720+08	.12529+08

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	239.5	.9852+06
URBAN	4507.	.1517+08

TOTAL IMPACT FACTOR = .1615+08
AVERAGE SOURCE IMPACT FACTOR = 2160.

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) 1974 -- IMPACT PARAMETERS RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 359.7 (P/KM2)

SECTOR 6 - IND. PROCESS COMBUSTION EQUIP TYPE 607 - BRICK + CERAMIC KILNS FUEL TYPE 13 - PROCESSED MAT'L

CONSUMPTION: TOTAL = .2994+08 Mg
SINGLE SOURCE = .1000+04 Mg

FRACTION: RURAL = .800
URBAN = .200

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 25.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.7411-01*	.4579+01*	.8574+01*
SOX	.1000+00*	.3225+01*	.6975+01*
HC	.5928-02*	.1800+03*	.1848+03*
CO	.1482-03*	.2500+01*	.4000+01*
PART	.1345+00	.6672+00	.7670+00
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.13451+00	.66717+00	.76704+00

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	1490.	.3370+08
URBAN	.2759+05	.1652+09

TOTAL IMPACT FACTOR = .2009+09
AVERAGE SOURCE IMPACT FACTOR = 6711.

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 399.7

SECTOR 6 - IND. PROCESS COMBUSTION EQUIP TYPE 606 - CAT CRACKING (FCCU) FUEL TYPE 13 - PROCESSED MAT'L

CONSUMPTION: TOTAL = .2175+12 L feed
SINGLE SOURCE = .1000+04 L feed

FRACTION: RURAL = .600
URBAN = .400

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 30.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2005-01*	.4520+01*	.8520+01*
SOX	.1767+00*	.3302+01*	.7052+01*
HC	.6317-01*	.1801+03*	.1841+03*
CO	.3920-01*	.2539+01*	.4039+01*
PART	.9225-01*	.1076+02*	.1276+02*
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.00000	.00000	.00000

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000
AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF MEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 559.7 (P/KM2)

SECTOR 6 - IND. PROCESS COMBUSTION EQUIP TYPE 609 - REFINERY FLARES FUEL TYPE 15 - PROCESSED MAT'L

CONSUMPTION: TOTAL = .7369+04 Mg
SINGLE SOURCE = .1000+01 Mg

FRACTION: RURAL = .600
URBAN = .400

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 60.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2194-01*	.4522+01*	.8522+01*
SOX	.0000 *	.0000 *	.0000 *
HC	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
PART	.0000 *	.0000 *	.0000 *
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.00000	.00000	.00000

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000
AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NES

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 359.7

SECTOR 6 - IND. PROCESS COMBUSTION EQUIP TYPE 611 - IRON + STEEL FLARES FUEL TYPE 13 - PROCESSED MAT'L

CONSUMPTION: TOTAL = .3015+03 Mg
SINGLE SOURCE = .1000+01 Mg

FRACTION: RURAL = .600
URBAN = .400

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 60.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2194-01*	.4522+01*	.8522+01*
SOX	.0000 *	.0000 *	.0000 *
HC	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
PART	.0000 *	.0000 *	.0000 *
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.00000	.00000	.00000

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	.0000	.0000
URBAN	.0000	.0000

TOTAL IMPACT FACTOR = .0000
AVERAGE SOURCE IMPACT FACTOR = .0000

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 559.7 (P/KM2)

SECTOR 6 - IND. PROCESS COMBUSTION EQUIP TYPE 612 - REF. HTR.-NAT. DRAFT.GAS FUEL TYPE 13 - PROCESSED MAT'L

CONSUMPTION: TOTAL = .1061+01 (1E15 KJ/YR)
SINGLE SOURCE = .1000-02 (1E15 KJ/YR)

FRACTION: RURAL = .600
URBAN = .400

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 15.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.1264+08	.3050+08	.4638+08
SOX	.6705+00*	.3796+01*	.7546+01*
HC	.9840+06	.4076+08	.8254+08
CO	.0000 *	.0000 *	.0000 *
PART	.8259+06	.5022+07	.5808+07
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.1444+08	.1162+09	.1347+09

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	2598.	.1654+07
URBAN	.4846+05	.2056+08

TOTAL IMPACT FACTOR = .2222+08
AVERAGE SOURCE IMPACT FACTOR = .2094+05

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M)

WIND SPEED = 4.500 (M/S)

RURAL POP. = 22.34 (P/KM2)

URBAN POPL. = 559.7 (P/KM2)

SECTOR 6 - IND. PROCESS COMBUSTION

EQUIP TYPE 613 - REF. HTR.-NAT. DRAFT.OIL

FUEL TYPE 13 - PROCESSED NAT'L

CONSUMPTION: TOTAL = .2432+00 (1E15 KJ/YR)
SINGLE SOURCE = .1000-02 (1E15 KJ/YR)

FRACTION: RURAL = .600
URBAN = .400

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 15.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.3686+08	.8923+08	.1340+09
SOX	.1496+08	.2971+08	.4741+08
HC	.9970+06	.8076+08	.8255+08
CO	.0000 *	.0000 *	.0000 *
PART	.2273+08	.9806+08	.1122+09
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.77547+08	.29779+09	.37616+09

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	6653.	.9706+06
URBAN	.1353+06	.1316+08

TOTAL IMPACT FACTOR = .1413+08
AVERAGE SOURCE IMPACT FACTOR = .5812+05

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT (M) = 1500. WIND SPEED (M/S) = 4.500 RURAL POP. (P/KM2) = 22.34 URBAN POPL. (P/KM2) = 359.7

SECTOR 6 - IND. PROCESS COMBUSTION EQUIP TYPE 614 - REF. HTR.-FOR. DRAFT,GAS FUEL TYPE 18 - PROCESSED MAT'L

CONSUMPTION: TOTAL = .1215+00 (1E15 KJ/YR) FRACTION: RURAL = .600 CONTROLS: NOX = .0000
SINGLE SOURCE = .1000-02 (1E15 KJ/YR) URBAN = .400 SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 15.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.2447+08	.5613+08	.8606+08
SOX	.6705+00*	.3796+01*	.7546+01*
HC	.9840+06	.8076+08	.8254+08
CO	.0000 *	.0000 *	.0000 *
PART	.8259+06	.5022+07	.5808+07
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.26279+08	.14392+09	.17640+09

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	3215.	.2345+06
URBAN	.6345+05	.3085+07

TOTAL IMPACT FACTOR = .3319+07
AVERAGE SOURCE IMPACT FACTOR = .2731+05

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

TABLE F-1. Continued

1974 -- IMPACT PARAMETERS

INVERSION HEIGHT = 1500. (M) WIND SPEED = 4.500 (M/S) RURAL POP. = 22.34 (P/KM2) URBAN POPL. = 859.7 (P/KM2)

SECTOR 6 - IND. PROCESS COMBUSTION EQUIP TYPE 615 - REF. HTR.-FOR. DRAFT.OIL FUEL TYPE 13 - PROCESSED MAT'L

CONSUMPTION: TOTAL = .7641-01 (1E15 KJ/YR) FRACTION: RURAL = .600
SINGLE SOURCE = .1000-02 (1E15 KJ/YR) URBAN = .400

CONTROLS: NOX = .0000
SOX = .0000
PARTICULATES = .0000

GAUSSIAN APPROXIMATED SOURCE
EFFECTIVE STACK HEIGHT = 15.00 (M)

POLLUTANT	NATURAL	RURAL	URBAN
NOX	.5144+08	.1226+09	.1659+09
SOX	.1496+08	.2971+08	.4741+08
HC	.9970+06	.8078+08	.8255+08
CO	.0000 *	.0000 *	.0000 *
PART	.2273+08	.9806+08	.1122+09
SULFAT	.0000 *	.0000 *	.0000 *
POM HI	.0000 *	.0000 *	.0000 *
BA	.0000 *	.0000 *	.0000 *
BE	.0000 *	.0000 *	.0000 *
B	.0000 *	.0000 *	.0000 *
CR	.0000 *	.0000 *	.0000 *
CO	.0000 *	.0000 *	.0000 *
CU	.0000 *	.0000 *	.0000 *
PB	.0000 *	.0000 *	.0000 *
MN	.0000 *	.0000 *	.0000 *
TOTAL	.90125+08	.33115+09	.42808+09

POLLUTANT	NATURAL	RURAL	URBAN
HG	.0000 *	.0000 *	.0000 *
MO	.0000 *	.0000 *	.0000 *
NI	.0000 *	.0000 *	.0000 *
V	.0000 *	.0000 *	.0000 *
ZN	.0000 *	.0000 *	.0000 *
ZR	.0000 *	.0000 *	.0000 *
AS	.0000 *	.0000 *	.0000 *
BI	.0000 *	.0000 *	.0000 *
AL	.0000 *	.0000 *	.0000 *
SB	.0000 *	.0000 *	.0000 *
CD	.0000 *	.0000 *	.0000 *
SE	.0000 *	.0000 *	.0000 *
P	.0000 *	.0000 *	.0000 *
SR	.0000 *	.0000 *	.0000 *

IMPACT FACTORS

	SINGLE SOURCE	MULTIPLE SOURCE
RURAL	7398.	.3392+06
URBAN	.1540+06	.4705+07

TOTAL IMPACT FACTOR = .5045+07
AVERAGE SOURCE IMPACT FACTOR = .6602+05

* RATIO OF MAXIMUM SURFACE CONCENTRATION PLUS BACKGROUND CONCENTRATION TO 10% OF NEG

*XQT SUMM

TABLE F-1. Continued

SOURCE		1974 -- SUMMARY IMPACT FACTORS SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 108 MEG				
UTILITY BOILERS										
TANGENTIAL BOILERS										
EASTERN BITUMIN.	G	.31705+08	.71335+09	.72622+11	.31118+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CD	
CENTRAL BITUMIN.	G	.31794+08	.71384+09	.43870+11	.31140+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CD	
WESTERN BITUMIN.	G	.31518+08	.71010+09	.23939+11	.30974+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CD	
LIGNITE	G	.40611+08	.85153+09	.13382+10	.28369+09	NOX	SOX	PART	BA	BE
						CR	AL			
HIGH S RES. OIL	G	.12501+07	.26993+08	.51468+09	.18755+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
MED S RES. OIL	G	.10075+07	.20639+08	.98898+09	.14357+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
LOW S RES. OIL	G	.92355+06	.18918+08	.11916+10	.12820+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
DISTILLATE OIL	G	.30895+05	.62825+06	.18437+07	.36578+06	NOX	SOX			
NATURAL GAS	G	.22914+05	.57325+06	.32150+08	.24855+06	NOX	PART	POM HI		
WALL FIRED BOILER										
EASTERN BITUMIN.	G	.13243+08	.40961+09	.56094+11	.17575+09	NOX	SOX	PART	BE	CR
						AL				
CENTRAL BITUMIN.	G	.13336+08	.41201+09	.54087+11	.17680+09	NOX	SOX	PART	BE	CR
						AL				
WESTERN BITUMIN.	G	.13110+08	.40599+09	.18409+11	.17419+09	NOX	SOX	PART	BE	CR
						AL				
LIGNITE	G	.17022+08	.46743+09	.35304+09	.15214+09	NOX	SOX	PART	BA	BE
						CR	AL			
HIGH S RES. OIL	G	.15838+06	.42179+07	.38684+09	.29188+07	NOX	SOX	CR	NI	V
MED S RES. OIL	G	.13602+06	.36129+07	.83350+09	.25093+07	NOX	SOX	CR	NI	V
LOW S RES. OIL	G	.12794+06	.33879+07	.10099+10	.23447+07	NOX	SOX	CR	NI	V
DISTILLATE OIL	G	.93107+04	.11575+06	.58411+07	.51115+05	NOX	SOX			
NATURAL GAS	G	.14875+05	.35452+06	.12807+09	.15366+06	NOX				
OPPOSED WALL BOILER										
EASTERN BITUMIN.	G	.97591+08	.97269+09	.10629+1_	.42683+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CD
CENTRAL BITUMIN.	G	.97669+08	.97470+09	.64187+10	.42775+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CD
WESTERN BITUMIN.	G	.97395+08	.97028+09	.35077+10	.42578+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CD
LIGNITE	G	.61222+08	.11678+10	.49332+09	.39920+09	NOX	SOX	PART	BA	BE
						CR	CU	NI	AL	
HIGH S RES. OIL	G	.13660+07	.29602+08	.21985+09	.20567+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
MED S RES. OIL	G	.10986+07	.22551+08	.42238+09	.15686+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
LOW S RES. OIL	G	.10066+07	.20685+08	.48803+09	.13979+08	NOX	SOX	PART	CR	CO

TABLE F-1. Continued

SOURCE		1974 -- SUMMARY IMPACT FACTORS: SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% REG
DISTILLATE OIL	G	.73249+05	.19011+07	.17069+07	.84096+06	CU PB NI V AL SE NOX SOX
NATURAL GAS	G	.16322+06	.40672+07	.16073+09	.17638+07	NOX POM HI
CYCLONE BOILER						
EASTERN BITUMIN.	G	.37489+08	.80853+09	.41161+10	.35362+09	NOX SOX PART BE CR CU PB NI AL CD
CENTRAL BITUMIN.	G	.37609+08	.81046+09	.33740+11	.35448+09	NOX SOX PART BE CR CU PB NI AL CD
LIGNITE	G	.48931+08	.98797+09	.33371+10	.33064+09	NOX SOX PART BA BE CR AL
HIGH S RES. OIL	G	.25056+06	.56920+07	.23957+08	.39508+07	NOX SOX CR NI V
MED S RES. OIL	G	.21445+06	.47226+07	.46409+08	.32800+07	NOX SOX CR NI V
LOW S RES. OIL	G	.20162+06	.43699+07	.56766+08	.30361+07	NOX SOX CR NI V
NATURAL GAS	G	.87001+04	.22075+06	.25140+07	.95641+05	NOX
VERTICAL + STOKER BOILER						
ANTHRACITE	G	.17416+07	.22118+09	.11816+11	.85629+08	BE CR
EASTERN BITUMIN.	G	.11597+07	.21163+09	.22082+11	.67459+08	SOX BE
CENTRAL BITUMIN.	G	.11630+07	.21173+09	.22092+11	.67496+03	SOX BE
LIGNITE	G	.15230+07	.21747+09	.13698+10	.66307+08	PART BE
PACKAGED BOILERS						
WALL FIRED W-TUBE >29 MW						
DISTILLATE OIL	G	.23717+08	.63454+05	.46744+07	.43565+05	NOX SOX
NATURAL GAS	G	.19004+04	.50591+05	.24471+08	.20890+05	NOX
PROCESS GAS	G	.19004+04	.50591+05	.34280+07	.20890+05	NOX
BIT/LIG COAL	G	.28322+07	.23873+09	.77757+11	.12078+09	NOX SOX PART BE CR AL
RESIDUAL OIL	G	.56263+05	.20848+07	.69769+09	.86768+06	NOX SOX CR NI V
STOKER W-TUBE >29 MW						
BIT/LIG COAL	G	.18239+07	.22249+09	.76345+11	.83471+08	NOX SOX PART BE CR AL
SINGLE BURNER W-T <29 MW						
DISTILLATE OIL	G	.14213+02	.83205+03	.18080+06	.15628+03	SOX
NATURAL GAS	G	.30071+02	.82471+03	.13295+07	.10953+03	NOX
PROCESS GAS	G	.55093+02	.14906+04	.14316+06	.19864+03	NOX
RESIDUAL OIL	G	.36067+04	.11925+06	.22812+09	.38298+05	NOX SOX CR NI V
SCOTCH FIRETUBE <29 MW						
DISTILLATE OIL	G	.76894+03	.16874+05	.10039+09	.62447+08	POM HI
NATURAL GAS	G	.40829+04	.88279+05	.28167+09	.12502+05	POM HI
PROCESS GAS	G	.78300+04	.16875+06	.65783+07	.23922+05	NOX POM HI
RESIDUAL OIL	G	.17705+04	.46508+05	.44913+09	.15191+05	NOX SOX POM HI CR NI V
FIREBOX FIRETUBE <29 MW						
DISTILLATE OIL	G	.68598+03	.15050+05	.86852+06	.55697+04	POM HI
NATURAL GAS	G	.00000	.00000	.00000	.00000	
PROCESS GAS	G	.14715+02	.40079+03	.15197+05	.53323+02	NOX
RESIDUAL OIL	G	.15639+04	.41620+05	.27734+09	.13595+05	NOX SOX POM HI CR NI V
STOKER FIRED W-TUBE <29 MW						
ANTHRACITE	G	.11772+07	.21203+09	.55723+10	.51782+08	NOX SOX PART BE CR CO CU NI

TABLE F-1. Continued

SOURCE		1974 -- SUMMARY IMPACT FACTORS SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 1X NEG
BIT/LIG COAL	G	.80143+06	.20593+09	.66697+12	.84903+08	NOX SOX PART BE CR CU NI AL CO
CAST IRON BOILERS						
DISTILLATE OIL	G	.00000	.00000	.00000	.00000	
NATURAL GAS	G	.00000	.00000	.00000	.00000	
RESIDUAL OIL	G	.41741+02	.16897+04	.24728+08	.70094+03	NI V
STOKER F-T BOILER <29 MW						
ANTHRACITE	G	.12289+06	.98695+08	.40812+11	.23780+08	SOX PART POM HI BE CR CO
BIT/LIG COAL	G	.70160+05	.55518+08	.51808+12	.22804+08	SOX PART POM HI BE CR AL
HRT BOILERS <29 MW						POM HI
DISTILLATE OIL	G	.68598+03	.15050+05	.56680+08	.55697+04	
NATURAL GAS	G	.00000	.00000	.00000	.00000	
RESIDUAL OIL	G	.15839+04	.41620+05	.16850+09	.13595+05	NOX SOX POM HI CR NI V
RES/COMM STEAM + HOT WAT						
ANTHRACITE	D	.00000	.00000	.00000	.00000	
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
BIT/LIG COAL	D	.00000	.00000	.00000	.00000	
RESIDUAL OIL	D	.00000	.00000	.00000	.00000	
WARM AIR FURNACES						
WARM AIR CENTRAL FURNACE						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
OIL	D	.00000	.00000	.00000	.00000	
WARM AIR SPACE HEATER						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
OIL	D	.00000	.00000	.00000	.00000	
MISCELLANEOUS COMBUSTION						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
GAS TURBINES						
SIMPLE CYCLE >15 MW						
DISTILLATE OIL	G	.72520+04	.16370+06	.23755+08	.87040+05	NOX SOX HC PART
NATURAL GAS	G	.36971+04	.80430+05	.12717+08	.58024+05	NOX SOX HC PART
SIMPLE CYCLE 4-15 MW						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
SIMPLE CYCLE <4 MW						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
RECIPROCATING I/C ENGINE						
C. I. >75 KW/CYL						
DISTILLATE OIL	G	.38501+03	.81425+04	.60893+07	.19365+04	NOX SOX HC PART
DUAL (OIL + GAS)	G	.10192+04	.17745+05	.17790+08	.43644+04	NOX HC
S. I. >75 KW/CYL						
NATURAL GAS	G	.14014+04	.24602+05	.23110+09	.48815+04	NOX HC
C. I. 75 KW-75 KW/CYL						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	

TABLE F-1. Concluded

SOURCE		1974 -- SUMMARY IMPACT FACTORS: SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% MEG			
S. I. 75 KW-75 KW/CYL NATURAL GAS	D	.00000	.00000	.00000	.00000				
S. I. 75 KW-75 KW/CYL GASOLINE	D	.00000	.00000	.00000	.00000				
S. I. <75 KW GASOLINE	D	.00000	.00000	.00000	.00000				
IND. PROCESS COMBUSTION									
CEMENT KILNS PROCESSED MAT'L	G	.11165+04	.21545+05	.27065+08	.12353+05	SOX	PART		
GLASS MELTING FURNACES PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
GLASS ANNEALING LEHRS PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
COKE OVEN UNDERFIRE PROCESSED MAT'L	G	.42438+04	.78786+05	.28437+09	.19152+05	SOX	PART		
STEEL SINTERING MACHINES PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
OPEN HEARTH FURNCE (OIL) PROCESSED MAT'L	G	.23948+03	.45068+04	.16154+08	.21598+04	PART			
BRICK + CERAMIC KILNS PROCESSED MAT'L	G	.14905+04	.27591+05	.20090+09	.67106+04	PART			
CAT CRACKING (FCCU) PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
REFINERY FLARES PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
IRON + STEEL FLARES PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
REF. HTR.-NAT. DRAFT-GAS PROCESSED MAT'L	G	.25979+04	.48463+05	.22217+08	.20944+05	NOX	HC	PART	
REF. HTR.-NAT. DRAFT-OIL PROCESSED MAT'L	G	.66526+04	.13531+06	.14131+08	.58115+05	NOX	SOX	HC	PART
REF. HTR.-FOR. DRAFT-GAS PROCESSED MAT'L	G	.32152+04	.63454+05	.33192+07	.27311+05	NOX	HC	PART	
REF. HTR.-FOR. DRAFT-OIL PROCESSED MAT'L	G	.73979+04	.15396+06	.50946+07	.66021+05	NOX	SOX	HC	PART

*FIN

APPENDIX G

POLLUTION POTENTIAL SUMMARIES FOR THE ENERGY PROJECTION SCENARIOS IN 1985 AND 2000

Appendix G presents the summaries of pollution potential for the energy projection scenarios developed in Section 3.4. These summaries are given as follows:

- Reference high nuclear energy scenario for 1985: G-1; 2000: G-2
- Reference low nuclear energy scenario for 1985: G-3; 2000: G-4
- Conservation energy scenario for 1985: G-5; 2000: G-6
- Electrification energy scenario for 1985: G-7; 2000: G-8
- Synthetics energy scenario for 1985: G-9; 2000: G-10

The energy projections used in these scenarios are described in Section 3.4.1. The assessment of pollution potential for these rankings was developed using the Source Analysis Model (SAM) described in Section 5.1. These summaries show that coal-fired sources will continue to be major pollution sources in the future. Pollution from natural gas-fired equipment should be less significant due to the decreased dependence on natural gas usage. The reference low nuclear scenario shows the largest pollution potential through the year 2000. The synthetics scenario represents the lowest total pollution potential. This low pollution potential results primarily from using synthetic liquids and gases instead of coal for stationary combustion. A complete discussion of the results and conclusions

of these scenarios is given in Sections 5.3 and 5.4 respectively.

The results given in these summaries should not be considered as absolute results. They are based on very tenuous future conditions. In addition, some of the data, particularly for POMs and trace metals, is preliminary -- to be updated from ongoing testing. The results are only meant as indications of future pollution potential.

TABLE G-1. POLLUTION POTENTIAL OF THE REFERENCE HIGH NUCLEAR ENERGY SCENARIO FOR 1985

SOURCE		1985 -- SUMMARY IMPACT FACTORS SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% MEG				
UTILITY BOILERS										
TANGENTIAL BOILERS										
EASTERN BITUMIN.	G	.34010+08	.76865+09	.15576+12	.33521+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CO	
CENTRAL BITUMIN.	G	.34052+08	.76931+09	.94106+11	.33551+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CO	
WESTERN BITUMIN.	G	.33934+08	.76733+09	.51482+11	.33463+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CO	
LIGNITE	G	.43998+08	.92414+09	.28901+10	.30809+09	NOX	SOX	PART	BA	BE
						CR	AL			
HIGH S RES. OIL	G	.13722+07	.29625+08	.44988+09	.20584+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
MED S RES. OIL	G	.11057+07	.22645+08	.86412+09	.15753+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
LOW S RES. OIL	G	.10134+07	.20205+08	.99714+09	.14064+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
DISTILLATE OIL	G	.32872+05	.88134+06	.15618+07	.38923+06	NOX	SOX			
NATURAL GAS	G	.24859+05	.62474+06	.23251+08	.27081+06	NOX	PART	POM HI		
WALL FIRED BOILER										
EASTERN BITUMIN.	G	.14222+08	.44243+09	.12062+12	.18979+09	NOX	SOX	PART	BE	CR
						AL				
CENTRAL BITUMIN.	G	.14280+08	.44412+09	.73143+11	.19051+09	NOX	SOX	PART	BE	CR
						AL				
WESTERN BITUMIN.	G	.14169+08	.44115+09	.39822+11	.18923+09	NOX	SOX	PART	BE	CR
						AL				
LIGNITE	G	.18433+08	.50848+09	.76433+09	.16545+09	NOX	SOX	PART	BA	BE
						CR	AL			
HIGH S RES. OIL	G	.17341+06	.46189+07	.33736+09	.31963+07	NOX	SOX	CR	NI	V
MED S RES. OIL	G	.14885+06	.39543+07	.72628+09	.27366+07	NOX	SOX	CR	NI	V
LOW S RES. OIL	G	.13998+06	.37071+07	.87990+09	.25656+07	NOX	SOX	CR	NI	V
DISTILLATE OIL	G	.41768+04	.11236+06	.95154+07	.49612+05	NOX	SOX			
NATURAL GAS	G	.13722+05	.34619+06	.82994+08	.15003+06	NOX				
OPPOSED WALL BOILER										
EASTERN BITUMIN.	G	.51486+08	.10552+10	.22948+11	.46299+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CO
CENTRAL BITUMIN.	G	.51548+08	.10562+10	.13848+11	.46344+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CO
WESTERN BITUMIN.	G	.51361+08	.10530+10	.75801+10	.46203+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CO
LIGNITE	G	.66789+08	.12961+10	.10719+10	.43557+09	NOX	SOX	PART	BA	BE
						CR	CU	NI	AL	
HIGH S RES. OIL	G	.14935+07	.32338+08	.19123+09	.22468+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
MED S RES. OIL	G	.11998+07	.24592+08	.36688+09	.17106+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
LOW S RES. OIL	G	.10988+07	.21882+08	.42333+09	.15231+08	NOX	SOX	PART	CR	CO

TABLE G-1. Continued

SOURCE		1985 -- SUMMARY ---------- IMPACT FACTORS ---------- SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% MEG
DISTILLATE OIL	G	.73400+05	.19063+07	.13624+07	.84323+06	CU PB NI V AL SE
NATURAL GAS	G	.14632+06	.36127+07	.94793+08	.15676+07	NOX SOX
CYCLONE BOILER						
EASTERN BITUMIN.	G	.41187+08	.88834+09	.36059+10	.38852+09	NOX SOX PART BE CR
CENTRAL BITUMIN.	G	.41319+08	.89046+09	.29663+11	.38947+09	CU PB NI AL CO NOX SOX PART BE CR
LIGNITE	G	.53757+08	.10855+10	.29435+10	.36328+09	CU PB NI AL CO NOX SOX PART BA BE CR AL
HIGH S RES. OIL	G	.27524+06	.62532+07	.21932+08	.43402+07	NOX SOX CR NI V
MED S RES. OIL	G	.23557+06	.51881+07	.40059+08	.36033+07	NOX SOX CR NI V
LOW S RES. OIL	G	.22197+06	.48807+07	.50569+08	.33354+07	NOX SOX CR NI V
NATURAL GAS	G	.95569+04	.24251+06	.22185+07	.10507+06	NOX
VERTICAL + STOKER BOILER						
ANTHRACITE	G	.19131+07	.24298+09	.10010+11	.50127+08	BE CR
EASTERN BITUMIN.	G	.12739+07	.23250+09	.19407+11	.96075+08	SOX BE
CENTRAL BITUMIN.	G	.12775+07	.23260+09	.19416+11	.96121+08	SOX BE
LIGNITE	G	.16730+07	.23891+09	.11704+10	.72843+08	PART BE
PACKAGED BOILERS						
WALL FIRED W-TUBE >29 MW						
DISTILLATE OIL	G	.14931+04	.41124+05	.41315+07	.28046+05	NOX SOX
NATURAL GAS	G	.98660+03	.26654+05	.15726+08	.10997+05	NOX
PROCESS GAS	G	.98660+03	.26654+05	.22044+07	.10997+05	NOX
BIT/LIG COAL	G	.31111+07	.26227+09	.48423+11	.13269+09	NOX SOX PART BE CR AL
RESIDUAL OIL	G	.60693+05	.22613+07	.10388+10	.94094+06	NOX SOX CR NI V
STOKER W-TUBE >29 MW						
BIT/LIG COAL	G	.20035+07	.24442+09	.47551+11	.91699+08	NOX SOX PART BE CR AL
SINGLE BURNER W-T <29 MW						
DISTILLATE OIL	G	.00000	.00000	.00000	.00000	
NATURAL GAS	G	.29537+02	.81312+03	.15994+07	.10789+03	NOX
PROCESS GAS	G	.53670+02	.14574+04	.17063+06	.19409+03	NOX
RESIDUAL OIL	G	.39496+04	.13055+06	.34285+09	.41925+05	NOX SOX CR NI V
SCOTCH FIRETUBE <29 MW						
DISTILLATE OIL	G	.84466+03	.18538+05	.15141+09	.68602+04	POM HI
NATURAL GAS	G	.44850+04	.96981+05	.37788+09	.13735+05	POM HI
PROCESS GAS	G	.85862+04	.18503+06	.88084+07	.26233+05	NOX POM HI
RESIDUAL OIL	G	.19351+04	.50764+05	.67290+09	.16582+05	SOX POM HI CR NI V
FIREBOX FIRETUBE <29 MW						
DISTILLATE OIL	G	.75353+03	.16533+05	.13100+09	.61187+04	POM HI
NATURAL GAS	G	.00000	.00000	.00000	.00000	
PROCESS GAS	G	.81517+01	.22508+03	.10386+05	.29845+02	NOX
RESIDUAL OIL	G	.17281+04	.45400+05	.81535+09	.14830+05	SOX POM HI CR NI V
STOKER FIRED W-TUBE <29 MW						
ANTHRACITE	G	.12932+07	.23293+09	.34689+10	.56867+08	NOX SOX PART BE CR CO CU NI
BIT/LIG COAL	G	.88035+06	.22623+09	.81535+12	.93273+08	NOX SOX PART BE CR CU NI AL CO

TABLE G-1. Continued

SOURCE		1985 -- SUMMARY ---------- IMPACT FACTORS ---------- SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% MCG
CAST IRON BOILERS						
DISTILLATE OIL	G	.00000	.00000	.00000	.00000	
NATURAL GAS	G	.00000	.00000	.00000	.00000	
RESIDUAL OIL	G	.45852+02	.18563+04	.37294+08	.77004+03	NI V
STOKER F-T BOILER <29 MW						
ANTHRACITE	G	.13500+06	.10842+09	.25417+11	.26124+08	SOX PART POM HI BE CR CO
BIT/LIG COAL	G	.77069+05	.60991+08	.32266+12	.25052+08	SOX PART POM HI BE CR AL
HRT BOILERS <29 MW						
DISTILLATE OIL	G	.75353+03	.16533+05	.65493+08	.61187+04	POM HI
NATURAL GAS	G	.00000	.00000	.00000	.00000	
RESIDUAL OIL	G	.17281+04	.45400+05	.25236+09	.14830+05	SOX POM HI CR NI V
RES/COMM STEAM + HOT WAT						
ANTHRACITE	D	.00000	.00000	.00000	.00000	
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
BIT/LIG COAL	D	.00000	.00000	.00000	.00000	
RESIDUAL OIL	D	.00000	.00000	.00000	.00000	
WARM AIR FURNACES						
WARM AIR CENTRAL FURNACE						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
OIL	D	.00000	.00000	.00000	.00000	
WARM AIR SPACE HEATER						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
OIL	D	.00000	.00000	.00000	.00000	
MISCELLANEOUS COMBUSTION						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
GAS TURBINES						
SIMPLE CYCLE >15 MW						
DISTILLATE OIL	G	.50105+04	.11041+06	.26731+08	.58765+05	NOX SOX HC PART
NATURAL GAS	G	.31935+04	.67680+05	.18132+08	.48992+05	NOX SOX HC PART
SIMPLE CYCLE 4 TO 15 MW						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
SIMPLE CYCLE <4 MW						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
RECIPROCATING I/C ENGINE						
C. I. >75 KW/CYL						
DISTILLATE OIL	G	.39339+03	.82530+04	.93843+07	.19653+04	NOX SOX HC PART
DUAL (OIL + GAS)	G	.11045+04	.19131+05	.26328+08	.47097+04	NOX HC
S. I. >75 KW/CYL						
NATURAL GAS	G	.15395+04	.27027+05	.10805+09	.53626+04	NOX HC
C. I. 75KW-75KW/CYL						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
S. I. 75KW-75KW/CYL						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
GASOLINE	D	.00000	.00000	.00000	.00000	

TABLE G-1. Concluded

SOURCE		1985 -- SUMMARY ---------- IMPACT FACTORS ---------- SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 100 MEG
S. I. <75 KW GASOLINE	D	.00000	.00000	.00000	.00000	
IND. PROCESS COMBUSTION						
CEMENT KILNS PROCESSED MAT'L	G	.12286+04	.23669+05	.30007+08	.13571+05	SOX PART
GLASS MELTING FURNACES PROCESSED MAT'L	G	.00000	.00000	.00000	.00000	
GLASS ANNEALING LEHRS PROCESSED MAT'L	G	.00000	.00000	.00000	.00000	
COKE OVEN UNDERFIRE PROCESSED MAT'L	G	.46617+04	.86553+05	.31524+09	.21040+05	SOX PART
STEEL SINTERING MACHINES PROCESSED MAT'L	G	.00000	.00000	.00000	.00000	
OPEN HEARTH FURNCE (OIL) PROCESSED MAT'L	G	.26506+03	.49510+04	.17912+08	.23727+04	PART
BRICK + CERAMIC KILNS PROCESSED MAT'L	G	.16372+04	.30311+05	.22273+09	.73720+04	PART
CAT CRACKING (FCCU) PROCESSED MAT'L	G	.00000	.00000	.00000	.00000	
REFINERY FLARES PROCESSED MAT'L	G	.00000	.00000	.00000	.00000	
IRON + STEEL FLARES PROCESSED MAT'L	G	.00000	.00000	.00000	.00000	
REF. HTR.-NAT. DRAFT.GAS PROCESSED MAT'L	G	.28342+04	.52926+05	.24478+08	.22871+05	NOX HC PART
REF. HTR.-NAT. DRAFT.OIL PROCESSED MAT'L	G	.72476+04	.14768+06	.15566+08	.63421+05	NOX SOX HC PART
REF. HTR.-FOR. DRAFT.GAS PROCESSED MAT'L	G	.34376+04	.67531+05	.35667+07	.29075+05	NOX HC PART
REF. HTR.-FOR. DRAFT.OIL PROCESSED MAT'L	G	.78166+04	.16143+06	.53381+07	.69261+05	NOX SOX HC PART

*FIN

TABLE G-2. POLLUTION POTENTIAL OF THE REFERENCE HIGH NUCLEAR ENERGY SCENARIO FOR 2000

SOURCE		2000 -- SUMMARY IMPACT FACTORS SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% REG
UTILITY BOILERS						
TANGENTIAL BOILERS						
EASTERN BITUMIN.	G	.37785+08	.85506+09	.22810+12	.37287+09	NOX SOX PART BE CR CU NI AL CO
CENTRAL BITUMIN.	G	.37809+08	.85545+09	.13777+12	.37304+09	NOX SOX PART BE CR CU NI AL CO
WESTERN BITUMIN.	G	.37721+08	.85346+09	.75396+11	.37217+09	NOX SOX PART BE CR CU NI AL CO
LIGNITE	G	.46886+08	.10274+10	.42300+10	.34294+09	NOX SOX PART BA BE CR AL
HIGH S RES. OIL	G	.12323+07	.25249+08	.60739+09	.17564+08	NOX SOX PART CR CO CU PB NI V AL SE
MED S RES. OIL	G	.12029+07	.24435+08	.14760+10	.17080+08	NOX SOX PART CR CO CU PB NI V AL SE
LOW S RES. OIL	G	.11334+07	.22586+08	.17645+10	.15722+08	NOX SOX PART CR CO CU PB NI V AL SE
DISTILLATE OIL	G	.35327+05	.95124+06	.26686+07	.42001+06	NOX SOX
WALL FIRED BOILER						
EASTERN BITUMIN.	G	.15813+08	.49279+09	.17688+12	.21137+09	NOX SOX PART BE CR AL
CENTRAL BITUMIN.	G	.15830+08	.49323+09	.10693+12	.21157+09	NOX SOX PART BE CR AL
WESTERN BITUMIN.	G	.15784+08	.49201+09	.58452+11	.21104+09	NOX SOX PART BE CR AL
LIGNITE	G	.20572+08	.56803+09	.11243+10	.18481+09	NOX SOX PART BA BE CR AL
HIGH S RES. OIL	G	.16296+06	.43273+07	.50017+09	.29947+07	NOX SOX CR NI V
MED S RES. OIL	G	.16046+06	.42565+07	.12377+10	.29458+07	NOX SOX CR NI V
LOW S RES. OIL	G	.15455+06	.40931+07	.15379+10	.28328+07	NOX SOX CR NI V
DISTILLATE OIL	G	.24845+04	.68214+05	.43338+07	.30091+05	NOX SOX
OPPOSED WALL BOILER						
EASTERN BITUMIN.	G	.57138+08	.11718+10	.33553+11	.51415+09	NOX SOX PART BE CR CU PB NI AL CO
CENTRAL BITUMIN.	G	.57174+08	.11724+10	.20236+11	.51441+09	NOX SOX PART BE CR CU PB NI AL CO
WESTERN BITUMIN.	G	.56834+08	.11654+10	.11262+11	.52148+09	NOX SOX PART BE CR CU PB NI AL CO
LIGNITE	G	.74158+08	.14391+10	.15678+10	.48365+09	NOX SOX PART BA BE CR CU NI AL
HIGH S RES. OIL	G	.13927+07	.28819+08	.27003+09	.20042+08	NOX SOX PART CR CO CU PB NI V AL SE
MED S RES. OIL	G	.12765+07	.25800+08	.60924+09	.17952+08	NOX SOX PART CR CO CU PB NI V AL SE
LOW S RES. OIL	G	.11998+07	.23748+08	.72749+09	.16533+08	NOX SOX PART CR CO CU PB NI V AL SE

TABLE G-2. Continued

SOURCE		2000 -- SUMMARY IMPACT FACTORS SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% MEG				
DISTILLATE OIL	G	.52459+05	.13816+07	.15626+07	.61069+06	NOX	SOX			
CYCLONE BOILER										
CENTRAL BITUMIN.	G	.46269+08	.99702+09	.24541+11	.43608+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CO
LIGNITE	G	.60198+08	.12154+10	.24269+10	.40676+09	NOX	SOX	PART	BA	BE
						CR	AL			
HIGH S RES. OIL	G	.30821+06	.70015+07	.17190+08	.46596+07	NOX	SOX	CR	NI	V
MED S RES. OIL	G	.26379+06	.58090+07	.34659+08	.40345+07	NOX	SOX	CR	NI	V
LOW S RES. OIL	G	.24801+06	.53752+07	.41518+08	.37345+07	NOX	SOX	CR	NI	V
VERTICAL + STOKER BOILER										
ANTHRACITE	G	.21423+07	.27206+09	.82452+10	.56126+08	BE	CR			
EASTERN BITUMIN.	G	.14265+07	.26032+09	.16050+11	.10757+09	SOX	BE			
CENTRAL BITUMIN.	G	.14306+07	.26044+09	.16058+11	.10762+09	SOX	BE			
LIGNITE	G	.18734+07	.26750+09	.93607+09	.81561+08	PART	BE			
PACKAGED BOILERS										
WALL FIRED W-TUBE >29 MW										
DISTILLATE OIL	G	.12158+04	.34040+05	.37909+07	.23208+05	NOX	SOX			
NATURAL GAS	G	.63641+03	.17371+05	.92228+07	.71630+04	NOX				
PROCESS GAS	G	.63389+03	.17331+05	.12881+07	.71456+04	NOX				
BIT/LIG COAL	G	.34826+07	.29362+09	.76151+11	.14855+09	NOX	SOX	PART	BE	CR
						AL				
RESIDUAL OIL	G	.66988+05	.25059+07	.12762+10	.10426+07	NOX	SOX	CR	NI	V
STOKER W-TUBE >29 MW										
BIT/LIG COAL	G	.22432+07	.27366+09	.74781+11	.10267+09	NOX	SOX	PART	BE	CR
						AL				
SINGLE BURNER W-T <29 MW										
DISTILLATE OIL	G	.17483+02	.55144+03	.33856+06	.19223+03	SOX				
NATURAL GAS	G	.32928+02	.90804+03	.16063+07	.12044+03	NOX				
PROCESS GAS	G	.59797+02	.16269+04	.17140+06	.21651+03	NOX				
RESIDUAL OIL	G	.42785+04	.14244+06	.41460+09	.45728+05	NOX	SOX	CR	NI	V
SCOTCH FIRETUBE <29 MW										
DISTILLATE OIL	G	.94585+03	.20756+05	.18797+09	.76613+04	POM HI				
NATURAL GAS	G	.50223+04	.10859+06	.38070+09	.15379+05	POM HI				
PROCESS GAS	G	.96137+04	.20708+06	.88728+07	.29360+05	NOX	POM HI			
RESIDUAL OIL	G	.21647+04	.56839+05	.83593+09	.18567+05	SOX	POM HI	CR	NI	V
FIREBOX FIRETUBE <29 MW										
DISTILLATE OIL	G	.84381+03	.18512+05	.16263+09	.68510+04	POM HI				
NATURAL GAS	G	.00000	.00000	.00000	.00000					
PROCESS GAS	G	.47462+01	.13198+03	.54715+04	.17478+02	NOX				
RESIDUAL OIL	G	.19351+04	.50833+05	.51561+09	.16604+05	SOX	POM HI	CR	NI	V
STOKER FIRED W-TUBE <29 MW										
ANTHRACITE	G	.14481+07	.26081+09	.54573+10	.63694+08	NOX	SOX	PART	BE	CR
						CO	CU	NI		
BIT/LIG COAL	G	.98579+06	.25330+09	.65343+12	.10443+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CO	
CAST IRON BOILERS										
DISTILLATE OIL	G	.00000	.00000	.00000	.00000					
NATURAL GAS	G	.00000	.00000	.00000	.00000					
RESIDUAL OIL	G	.51345+02	.20785+04	.46296+08	.86219+05	NI	V			
STOKER F-T BOILER <29 MW										
ANTHRACITE	G	.15117+06	.12140+09	.39969+11	.29251+08	SOX	PART	POM HI	BE	CR

TABLE G-2. Continued

SOURCE		2000 -- SUMMARY ---------- IMPACT FACTORS ---------- SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% MEG
BIT/LIG COAL	G	.86302+05	.68289+08	.50741+12	.28050+08	CO SOX PART POM HI BE CR AL
HRT BOILERS <29 MW						
DISTILLATE OIL	G	.84381+03	.18512+05	.10612+09	.68510+04	POM HI
NATURAL GAS	G	.00000	.00000	.00000	.00000	
RESIDUAL OIL	G	.19351+04	.50833+05	.31326+09	.16604+05	SOX POM HI CR NI V
RES/COMM STEAM + HOT WAT						
ANTHRACITE	D	.00000	.00000	.00000	.00000	
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
BIT/LIG COAL	D	.00000	.00000	.00000	.00000	
RESIDUAL OIL	D	.00000	.00000	.00000	.00000	
WARM AIR FURNACES						
WARM AIR CENTRAL FURNACE						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
OIL	D	.00000	.00000	.00000	.00000	
WARM AIR SPACE HEATER						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
OIL	D	.00000	.00000	.00000	.00000	
MISCELLANEOUS COMBUSTION						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
GAS TURBINES						
SIMPLE CYCLE >15 MW						
DISTILLATE OIL	G	.32123+04	.66104+05	.38231+08	.35287+05	NOX SOX HC PART
NATURAL GAS	G	.27197+04	.55697+05	.34102+08	.40228+05	NOX SOX HC PART
SIMPLE CYCLE 3.7-15 MW						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
SIMPLE CYCLE <3.7 MW						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
RECIPROCATING I/C ENGINE						
C. I. >75 KW/CYL						
DISTILLATE OIL	G	.38684+03	.79693+04	.14297+08	.19033+04	NOX SOX HC PART
DUAL (OIL + GAS)	G	.12061+04	.20646+05	.32036+08	.50940+04	NOX HC
S. I. >75 KW/CYL						
NATURAL GAS	G	.17239+04	.30262+05	.45455+08	.60045+04	NOX HC
C. I. 75KW-75KW/CYL						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
S. I. 75KW-75KW/CYL						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
GASOLINE	D	.00000	.00000	.00000	.00000	
S. I. <75 KW						
GASOLINE	D	.00000	.00000	.00000	.00000	

TABLE G-2. Concluded

SOURCE		2000 -- SUMMARY IMPACT FACTORS SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% MEG			
IND. PROCESS COMBUSTION									
CEMENT KILNS									
PROCESSED MAT'L	G	.13758+04	.26502+05	.40416+08	.15195+05	SOX	PART		
GLASS MELTING FURNACES									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
GLASS ANNEALING LEHRS									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
COKE OVEN UNDERFIRE									
PROCESSED MAT'L	G	.52202+04	.96910+05	.92464+09	.23556+05	SOX	PART		
STEEL SINTERING MACHINES									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
OPEN HEARTH FURNCE (OIL)									
PROCESSED MAT'L	G	.29458+03	.55435+04	.24126+08	.26566+04	PART			
BRICK + CERAMIC KILNS									
PROCESSED MAT'L	G	.18334+04	.33939+05	.30002+09	.82544+04	PART			
CAT CRACKING (FCCU)									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
REFINERY FLARES									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
IRON + STEEL FLARES									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
REF. HTR.-NAT. DRAFT.GAS									
PROCESSED MAT'L	G	.29423+04	.53482+05	.29836+08	.23158+05	NOX	HC	PART	
REF. HTR.-NAT. DRAFT.OIL									
PROCESSED MAT'L	G	.74406+04	.14882+06	.18868+08	.63998+05	NOX	SOX	HC	PART
REF. HTR.-FOR. DRAFT.GAS									
PROCESSED MAT'L	G	.35226+04	.67779+05	.43220+07	.29225+05	NOX	HC	PART	
REF. HTR.-FOR. DRAFT.OIL									
PROCESSED MAT'L	G	.79094+04	.15987+06	.63821+07	.68695+05	NOX	SOX	HC	PART

*FIN

TABLE G-3. POLLUTION POTENTIAL OF THE REFERENCE LOW NUCLEAR ENERGY SCENARIO FOR 1985

1985 -- SUMMARY

SOURCE		IMPACT FACTORS: SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% REG
UTILITY BOILERS						
TANGENTIAL BOILERS						
EASTERN BITUMIN.	G	.34010+08	.76865+09	.27259+12	.33521+09	NOX SOX PART BE CR CU NI AL CD
CENTRAL BITUMIN.	G	.34052+08	.76931+09	.16470+12	.33551+09	NOX SOX PART BE CR CU NI AL CD
WESTERN BITUMIN.	G	.33934+08	.76753+09	.90109+11	.33463+09	NOX SOX PART BE CR CU NI AL CD
LIGNITE	G	.43998+08	.92414+09	.50570+10	.30804+09	NOX SOX PART BA BE CR AL
HIGH S RES. OIL	G	.13722+07	.29625+08	.44988+09	.20584+08	NOX SOX PART CR CO CU PB NI V AL SE
MED S RES. OIL	G	.11057+07	.22645+08	.86412+09	.15753+08	NOX SOX PART CR CO CU PB NI V AL SE
LOW S RES. OIL	G	.10134+07	.20205+08	.99714+09	.14064+08	NOX SOX PART CR CO CU PB NI V AL SE
DISTILLATE OIL	G	.52872+05	.88134+06	.15618+07	.38923+06	NOX SOX
NATURAL GAS	G	.24859+05	.62474+06	.23251+08	.27081+06	NOX PART POM HI
WALL FIRED BOILER						
EASTERN BITUMIN.	G	.14222+08	.44243+09	.21110+12	.18979+09	NOX SOX PART BE CR AL
CENTRAL BITUMIN.	G	.14280+08	.44412+09	.12600+12	.19051+09	NOX SOX PART BE CR AL
WESTERN BITUMIN.	G	.14169+08	.44115+09	.69697+11	.18923+09	NOX SOX PART BE CR AL
LIGNITE	G	.18433+08	.50848+09	.13578+10	.16545+09	NOX SOX PART BA BE CR AL
HIGH S RES. OIL	G	.17341+06	.44169+07	.33736+09	.31963+07	NOX SOX CR NI V
MED S RES. OIL	G	.14885+06	.39543+07	.72628+09	.27366+07	NOX SOX CR NI V
LOW S RES. OIL	G	.13998+06	.37071+07	.87990+09	.25656+07	NOX SOX CR NI V
DISTILLATE OIL	G	.41768+04	.11236+06	.45154+07	.49612+05	NOX SOX
NATURAL GAS	G	.13722+05	.34619+06	.82994+08	.15003+06	NOX
OPPOSED WALL BOILER						
EASTERN BITUMIN.	G	.51486+08	.10552+10	.40159+11	.46299+09	NOX SOX PART BE CR CU PB NI AL CD
CENTRAL BITUMIN.	G	.51548+08	.10562+10	.24233+11	.46344+09	NOX SOX PART BE CR CU PB NI AL CD
WESTERN BITUMIN.	G	.51361+08	.10530+10	.13265+11	.46203+09	NOX SOX PART BE CR CU PB NI AL CD
LIGNITE	G	.66789+08	.12961+10	.18757+10	.43557+09	NOX SOX PART BA BE CR CU NI AL
HIGH S RES. OIL	G	.14935+07	.32338+08	.19123+09	.22468+08	NOX SOX PART CR CO CU PB NI V AL SE
MED S RES. OIL	G	.11998+07	.24592+08	.36688+09	.17106+08	NOX SOX PART CR CO CU PB NI V AL SE
LOW S RES. OIL	G	.10980+07	.21882+08	.42333+09	.15231+08	NOX SOX PART CR CO

TABLE G-3. Continued

SOURCE		1985 -- SUMMARY IMPACT FACTORS				POLLUTANTS EXCEEDING 10% REG				
		SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE					
DISTILLATE OIL	G	.73400+05	.19063+07	.13624+07	.84323+06	NOX	SOX			
NATURAL GAS	G	.14632+06	.36127+07	.94793+08	.15676+07	NOX	POM HI			
CYCLONE BOILER										
EASTERN BITUMIN.	G	.41187+08	.08834+09	.63103+10	.38852+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CD
CENTRAL BITUMIN.	G	.41319+08	.89046+09	.51897+11	.38947+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CD
LIGNITE	G	.53757+08	.10855+10	.51511+10	.36328+09	NOX	SOX	PART	BA	BE
						CR	AL			
HIGH S RES. OIL	G	.27524+06	.62532+07	.21932+08	.43402+07	NOX	SOX	CR	NI	V
MED S RES. OIL	G	.23557+06	.51881+07	.40059+08	.36033+07	NOX	SOX	CR	NI	V
LOW S RES. OIL	G	.22147+06	.48007+07	.50564+08	.33354+07	NOX	SOX	CR	NI	V
NATURAL GAS	G	.95569+04	.24251+06	.22165+07	.10507+06	NOX				
VERTICAL + STOKER BOILER										
ANTHRACITE	G	.19131+07	.29298+09	.17512+11	.50127+08	BE	CR			
EASTERN BITUMIN.	G	.12739+07	.23250+09	.33962+11	.96075+08	SOX	BE			
CENTRAL BITUMIN.	G	.12775+07	.23260+09	.33978+11	.96121+08	SOX	BE			
LIGNITE	G	.16730+07	.23891+09	.20483+10	.72843+08	PART	BE			
PACKAGED BOILERS										
WALL FIRED W-TUBE >29 MW										
DISTILLATE OIL	G	.14931+04	.41124+05	.41315+07	.28046+05	NOX	SOX			
NATURAL GAS	G	.98660+03	.26654+05	.15728+08	.10997+05	NOX				
PROCESS GAS	G	.98660+03	.26654+05	.22044+07	.10997+05	NOX				
BIT/LIG COAL	G	.81111+07	.26227+09	.84736+11	.13269+09	NOX	SOX	PART	BE	CR
						AL				
RESIDUAL OIL	G	.60693+05	.22613+07	.10388+10	.94094+06	NOX	SOX	CR	NI	V
STOKER W-TUBE >29 MW										
BIT/LIG COAL	G	.20035+07	.29492+09	.83205+11	.91699+08	NOX	SOX	PART	BE	CR
						AL				
SINGLE BURNER W-T <29 MW										
DISTILLATE OIL	G	.00000	.00000	.00000	.00000					
NATURAL GAS	G	.29537+02	.81312+03	.15994+07	.10769+03	NOX				
PROCESS GAS	G	.53670+02	.14574+04	.17083+06	.19404+03	NOX				
RESIDUAL OIL	G	.39946+04	.13055+06	.34285+09	.41925+05	NOX	SOX	CR	NI	V
SCOTCH FIRETUBE <29 MW										
DISTILLATE OIL	G	.84466+03	.18538+05	.15141+09	.68602+04	POM HI				
NATURAL GAS	G	.44850+04	.96981+05	.37788+09	.13735+05	POM HI				
PROCESS GAS	G	.85862+04	.18503+06	.88084+07	.96233+05	NOX	POM HI			
RESIDUAL OIL	G	.19331+04	.50764+05	.67290+09	.16562+05	SOX	POM HI	CR	NI	V
FIREBOX FIRETUBE <29 MW										
DISTILLATE OIL	G	.75353+03	.16533+05	.13100+09	.61187+04	POM HI				
NATURAL GAS	G	.00000	.00000	.00000	.00000					
PROCESS GAS	G	.81517+01	.2250A+03	.10386+05	.29845+02	NOX				
RESIDUAL OIL	G	.17281+04	.45400+05	.41535+09	.14830+05	SOX	POM HI	CR	NI	V
STOKER FIRED W-TURE <29 MW										
ANTHRACITE	G	.12932+07	.23293+09	.60721+10	.56887+08	NOX	SOX	PART	BE	CR
						CO	CU	NI		
BIT/LIG COAL	G	.88035+06	.22623+09	.72698+12	.93273+08	NOX	SOX	PART	BE	CR
						CU	NI	AL	CD	

TABLE G-3. Continued

SOURCE		1985 -- SUMMARY ---------- IMPACT FACTORS ---------- SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% MEG
CAST IRON BOILERS						
DISTILLATE OIL	G	.00000	.00000	.00000	.00000	
NATURAL GAS	G	.00000	.00000	.00000	.00000	
RESIDUAL OIL	G	.95852+02	.18563+04	.37294+08	.77004+03	NI V
STOKER F-T BOILER <29 MW						
ANTHRACITE	G	.13500+06	.10842+09	.44483+11	.26124+08	SOX PART POM HI BE CR CO
BIT/LIG COAL	G	.77069+05	.60991+08	.56465+12	.25052+08	SOX PART POM HI BE CR AL
HRT BOILERS <29 MW						POM HI
DISTILLATE OIL	G	.75353+03	.16533+05	.65493+08	.61187+04	
NATURAL GAS	G	.00000	.00000	.00000	.00000	
RESIDUAL OIL	G	.17281+04	.45400+05	.25256+09	.14830+05	SOX POM HI CR NI V
RES/COMM STEAM + HOT WAT						
ANTHRACITE	D	.00000	.00000	.00000	.00000	
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
BIT/LIG COAL	D	.00000	.00000	.00000	.00000	
RESIDUAL OIL	D	.00000	.00000	.00000	.00000	
WARM AIR FURNACES						
WARM AIR CENTRAL FURNACE						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
OIL	D	.00000	.00000	.00000	.00000	
WARM AIR SPACE HEATER						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
OIL	D	.00000	.00000	.00000	.00000	
MISCELLANEOUS COMBUSTION						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
GAS TURBINES						
SIMPLE CYCLE >15 MW						
DISTILLATE OIL	G	.50105+04	.11041+06	.26731+08	.58765+05	NOX SOX HC PART
NATURAL GAS	G	.31935+04	.67880+05	.18132+08	.48992+05	NOX SOX HC PART
SIMPLE CYCLE 3.7-15 MW						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
SIMPLE CYCLE <3.7 MW						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
RECIPROCATING I/C ENGINE						
C. I. >75 KW/CYL						
DISTILLATE OIL	G	.39339+03	.82530+04	.93893+07	.19655+04	NOX SOX HC PART
DUAL (OIL + GAS)	G	.11045+04	.19131+05	.26328+08	.47097+04	NOX HC
S. I. >75 KW/CYL						
NATURAL GAS	G	.15395+04	.27027+05	.10805+09	.53626+04	NOX HC
C. I. 75KW-75KW/CYL						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
S. I. 75KW-75KW/CYL						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
GASOLINE	D	.00000	.00000	.00000	.00000	

TABLE G-3. Concluded

SOURCE		1985 -- SUMMARY IMPACT FACTORS SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% MEG
S. I. <75 kW GASOLINE	D	.00000	.00000	.00000	.00000	
IND. PROCESS COMBUSTION						
CEMENT KILNS PROCESSED MAT'L	G	.12286+04	.23669+05	.30007+08	.13571+05	SOX PART
GLASS MELTING FURNACES PROCESSED MAT'L	G	.00000	.00000	.00000	.00000	
GLASS ANNEALING LEHRS PROCESSED MAT'L	G	.00000	.00000	.00000	.00000	
COKE OVEN UNDERFIRE PROCESSED MAT'L	G	.46617+04	.86553+05	.31524+09	.21040+05	SOX PART
STEEL SINTERING MACHINES PROCESSED MAT'L	G	.00000	.00000	.00000	.00000	
OPEN HEARTH FURNCE (OIL) PROCESSED MAT'L	G	.26306+03	.49510+04	.17912+08	.23727+04	PART
BRICK + CERAMIC KILNS PROCESSED MAT'L	G	.16372+04	.30311+05	.22273+09	.73720+04	PART
CAT CRACKING (FCCU) PROCESSED MAT'L	G	.00000	.00000	.00000	.00000	
REFINERY FLARES PROCESSED MAT'L	G	.00000	.00000	.00000	.00000	
IRON + STEEL FLARES PROCESSED MAT'L	G	.00000	.00000	.00000	.00000	
REF. HTR.-NAT. DRAFT.GAS PROCESSED MAT'L	G	.28342+04	.52926+05	.24478+08	.22871+05	NOX HC PART
REF. HTR.-NAT. DRAFT.OIL PROCESSED MAT'L	G	.72476+04	.14768+06	.15566+08	.63421+05	NOX SOX HC PART
REF. HTR.-FOR. DRAFT.GAS PROCESSED MAT'L	G	.34376+04	.67531+05	.35667+07	.29075+05	NOX HC PART
REF. HTR.-FOR. DRAFT.OIL PROCESSED MAT'L	G	.78166+04	.16143+06	.53381+07	.69261+05	NOX SOX HC PART

*FIN

TABLE G-4. POLLUTION POTENTIAL OF THE REFERENCE LOW NUCLEAR ENERGY SCENARIO FOR 2000

SOURCE		2000 -- SUMMARY IMPACT FACTORS SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% MEG				
UTILITY BOILERS										
TANGENTIAL BOILERS										
EASTERN BITUMIN.	G	.37785+08	.85506+09	.39924+12	.37287+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CO	
CENTRAL BITUMIN.	G	.37809+08	.85545+09	.24111+12	.37304+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CO	
WESTERN BITUMIN.	G	.37721+08	.85346+09	.13193+12	.37217+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CO	
LIGNITE	G	.98886+08	.10274+10	.74033+10	.34244+09	NOX	SOX	PART	BA	BE
						CR	AL			
HIGH S RES. OIL	G	.12323+07	.25249+08	.60739+09	.17564+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
MED S RES. OIL	G	.12029+07	.24435+08	.14760+10	.17000+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
LOW S RES. OIL	G	.11334+07	.22588+08	.17645+10	.15722+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
DISTILLATE OIL	G	.85327+05	.95124+06	.26686+07	.42001+06	NOX	SOX			
WALL FIRED BOILER										
EASTERN BITUMIN.	G	.15813+08	.49279+09	.30953+12	.21137+09	NOX	SOX	PART	BE	CR
						AL				
CENTRAL BITUMIN.	G	.15830+08	.49323+09	.18713+12	.21157+09	NOX	SOX	PART	BE	CR
						AL				
WESTERN BITUMIN.	G	.15784+08	.49201+09	.10230+12	.21104+09	NOX	SOX	PART	BE	CR
						AL				
LIGNITE	G	.20572+08	.56803+09	.19676+10	.18481+09	NOX	SOX	PART	BA	BE
						CR	AL			
HIGH S RES. OIL	G	.16296+06	.43273+07	.50017+09	.29947+07	NOX	SOX	CR	NI	V
MED S RES. OIL	G	.16046+06	.42565+07	.12377+10	.29456+07	NOX	SOX	CR	NI	V
LOW S RES. OIL	G	.15455+06	.40931+07	.15379+10	.28328+07	NOX	SOX	CR	NI	V
DISTILLATE OIL	G	.24845+04	.68214+05	.43338+07	.30091+05	NOX	SOX			
OPPOSED WALL BOILER										
EASTERN BITUMIN.	G	.57138+08	.11716+10	.58726+11	.51815+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CO
CENTRAL BITUMIN.	G	.57174+08	.11724+10	.35417+11	.51841+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CO
WESTERN BITUMIN.	G	.58034+08	.11884+10	.19707+11	.52148+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CO
LIGNITE	G	.74150+04	.14391+10	.27422+10	.48365+09	NOX	SOX	PART	BA	BE
						CR	CU	NI	AL	
HIGH S RES. OIL	G	.13927+07	.28819+08	.27003+09	.20042+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
MED S RES. OIL	G	.12765+07	.25800+08	.60924+09	.17952+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
LOW S RES. OIL	G	.11998+07	.23748+08	.72749+09	.16533+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				

TABLE G-4. Continued

SOURCE		2000 -- SUMMARY: IMPACT FACTORS — SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% REG
CYCLONE BOILER						
DISTILLATE OIL	G	.52459+05	.13816+07	.15626+07	.61069+06	NOX SOX
CENTRAL BITUMIN.	G	.46269+08	.99702+09	.42946+11	.43608+09	NOX SOX PART BE CR
LIGNITE	G	.60198+08	.12154+10	.42485+10	.40676+09	CU PB NI AL CO
HIGH S RES. OIL	G	.30821+06	.70015+07	.17190+08	.48596+07	NOX SOX PART BA BE
MED S RES. OIL	G	.26379+06	.58090+07	.34659+08	.40345+07	CR AL
LOW S RES. OIL	G	.24801+06	.53752+07	.91518+08	.37345+07	NOX SOX CR NI V
VERTICAL + STOKER BOILER						NOX SOX CR NI V
ANTHRACITE	G	.21423+07	.27206+09	.14429+11	.56126+08	NOX SOX CR NI V
EASTERN BITUMIN.	G	.19265+07	.26032+09	.28100+11	.10757+09	BE CR
CENTRAL BITUMIN.	G	.19306+07	.26044+09	.28113+11	.10762+09	SOX BE
LIGNITE	G	.18734+07	.26750+09	.16381+10	.81561+08	SOX BE
						PART BE
PACKAGED BOILERS						
WALL FIRED W-TUBE >29 MW						
DISTILLATE OIL	G	.12158+04	.34040+05	.37909+07	.23208+05	NOX SOX
NATURAL GAS	G	.63691+03	.17371+05	.92228+07	.71630+04	NOX
PROCESS GAS	G	.63389+03	.17331+05	.12881+07	.71456+04	NOX
BIT/LIG COAL	G	.34826+07	.29362+09	.13327+12	.14855+09	NOX SOX PART BE CR
RESIDUAL OIL	G	.66988+05	.25059+07	.12762+10	.10426+07	AL
STOKER W-TUBE >29 MW						NOX SOX CR NI V
BIT/LIG COAL	G	.22432+07	.27366+09	.13086+12	.10267+09	NOX SOX PART BE CR
SINGLE BURNER W-T <29 MW						AL
DISTILLATE OIL	G	.17483+02	.53144+03	.33856+06	.19223+03	SOX
NATURAL GAS	G	.32928+02	.90804+03	.16063+07	.12044+03	NOX
PROCESS GAS	G	.59797+02	.16269+04	.17140+06	.21651+03	NOX
RESIDUAL OIL	G	.42785+04	.14244+06	.91460+09	.45728+05	NOX SOX CR NI V
SCOTCH FIRETUBE <29 MW						
DISTILLATE OIL	G	.94585+03	.20756+05	.18797+09	.76813+04	POM HI
NATURAL GAS	G	.50223+04	.10859+06	.38070+09	.15379+05	POM HI
PROCESS GAS	G	.96137+04	.20708+06	.88728+07	.29360+05	NOX POM HI
RESIDUAL OIL	G	.21647+04	.56839+05	.83593+09	.18567+05	SOX POM HI CR NI V
FIREBOX FIRETUBE <29 MW						
DISTILLATE OIL	G	.84381+03	.18512+05	.16263+09	.68510+04	POM HI
NATURAL GAS	G	.00000	.00000	.00000	.00000	
PROCESS GAS	G	.47462+01	.13198+03	.54715+04	.17470+02	NOX
RESIDUAL OIL	G	.19351+04	.50833+05	.51561+09	.16604+05	SOX POM HI CR NI V
STOKER FIRED W-TUBE <29 MW						
ANTHRACITE	G	.14481+07	.26081+09	.95502+10	.63694+08	NOX SOX PART BE CR
BIT/LIG COAL	G	.98579+06	.25330+09	.11436+13	.10493+09	CO CU NI
CAST IRON BOILERS						NOX SOX PART BE CR
DISTILLATE OIL	G	.00000	.00000	.00000	.00000	CU NI AL CO
NATURAL GAS	G	.00000	.00000	.00000	.00000	
RESIDUAL OIL	G	.51345+02	.20765+04	.46296+08	.86219+03	NI V
STOKER F-T BOILER <29 MW						
ANTHRACITE	G	.15117+06	.12140+09	.69946+11	.29251+08	SOX PART POM HI BE CR

TABLE G-4. Continued

SOURCE		2000 -- SUMMARY IMPACT FACTORS SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% MEG
BIT/LIG COAL	G	.86302+05	.68289+08	.88793+12	.26050+08	CO SOX PART POM HI BE CR AL
HRT BOILERS <29 MW						
DISTILLATE OIL	G	.84381+03	.18512+05	.10612+09	.68510+04	POM HI
NATURAL GAS	G	.00000	.00000	.00000	.00000	
RESIDUAL OIL	G	.19351+04	.50833+05	.31326+09	.16604+05	SOX POM HI CR NI V
RES/COMM STEAM + HOT WAT						
ANTHRACITE	D	.00000	.00000	.00000	.00000	
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
BIT/LIG COAL	D	.00000	.00000	.00000	.00000	
RESIDUAL OIL	D	.00000	.00000	.00000	.00000	
WARM AIR FURNACES						
WARM AIR CENTRAL FURNACE						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
OIL	D	.00000	.00000	.00000	.00000	
WARM AIR SPACE HEATER						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
OIL	D	.00000	.00000	.00000	.00000	
MISCELLANEOUS COMBUSTION						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
GAS TURBINES						
SIMPLE CYCLE >15 MW						
DISTILLATE OIL	G	.32123+04	.66104+05	.38231+08	.35287+05	NOX SOX HC PART
NATURAL GAS	G	.27197+04	.55697+05	.34102+08	.40228+05	NOX SOX HC PART
SIMPLE CYCLE 3.7-15 MW						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
SIMPLE CYCLE <3.7 MW						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
RECIPROCATING I/C ENGINE						
C. I. >75 KW/CYL						
DISTILLATE OIL	G	.38684+03	.79693+04	.14297+08	.19033+04	NOX SOX HC PART
DUAL (OIL + GAS)	G	.12061+04	.20646+05	.32036+08	.50940+04	NOX HC
S. I. >75 KW/CYL						
NATURAL GAS	G	.17239+04	.30262+05	.45455+08	.60045+04	NOX HC
C. I. 75KW-75KW/CYL						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
S. I. 75KW-75KW/CYL						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
GASOLINE	D	.00000	.00000	.00000	.00000	
S. I. <75 KW						
GASOLINE	D	.00000	.00000	.00000	.00000	

TABLE G-4. Concluded

SOURCE		2000 -- SUMMARY IMPACT FACTORS				POLLUTANTS EXCEEDING 10% REG			
		SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE				
IND. PROCESS COMBUSTION									
CEMENT KILNS									
PROCESSED MAT'L	G	.13758+04	.26502+05	.40416+08	.11195+05	SOX	PART		
GLASS MELTING FURNACES									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
GLASS ANNEALING LEHRS									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
COKE OVEN UNDERFIRE									
PROCESSED MAT'L	G	.52202+04	.96910+05	.42464+09	.23558+05	SOX	PART		
STEEL SINTERING MACHINES									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
OPEN HEARTH FURNCE (OIL)									
PROCESSED MAT'L	G	.29458+03	.55435+04	.24126+08	.26566+04	PART			
BRICK + CERAMIC KILNS									
PROCESSED MAT'L	G	.18334+04	.33939+05	.30002+09	.82544+04	PART			
CAT CRACKING (FCCU)									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
REFINERY FLARES									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
IRON + STEEL FLARES									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
REF. HTR.-NAT. DRAFT.GAS									
PROCESSED MAT'L	G	.29423+04	.53462+05	.29836+08	.23158+05	NOX	HC	PART	
REF. HTR.-NAT. DRAFT.OIL									
PROCESSED MAT'L	G	.74486+04	.14882+06	.18868+08	.63998+05	NOX	SOX	HC	PART
REF. HTR.-FOR. DRAFT.GAS									
PROCESSED MAT'L	G	.35226+04	.67779+05	.43220+07	.29225+05	NOX	HC	PART	
REF. HTR.-FOR. DRAFT.OIL									
PROCESSED MAT'L	G	.79094+04	.15987+06	.63821+07	.68695+05	NOX	SOX	HC	PART

*FIN

TABLE G-5. POLLUTION POTENTIAL OF THE CONSERVATION ENERGY SCENARIO FOR 1985

1985 -- SUMMARY

SOURCE		IMPACT FACTORS: SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% MEG				
UTILITY BOILERS										
TANGENTIAL BOILERS										
EASTERN BITUMIN.	G	.33790+08	.76461+09	.13325+12	.33343+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CD	
CENTRAL BITUMIN.	G	.33834+08	.76532+09	.80522+11	.33379+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CD	
WESTERN BITUMIN.	G	.33752+08	.76365+09	.44065+11	.33300+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CD	
LIGNITE	G	.43678+08	.91820+09	.24704+10	.30604+09	NOX	SOX	PART	BA	BE
						CR	AL			
HIGH S RES. OIL	G	.13732+07	.29654+08	.40906+09	.20604+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
MED S RES. OIL	G	.11068+07	.22674+08	.78592+09	.15772+08	SE				
						NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
LOW S RES. OIL	G	.10145+07	.20234+08	.90724+09	.14084+08	SE				
						NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
DISTILLATE OIL	G	.83957+05	.90990+06	.14650+07	.40184+06	SE				
NATURAL GAS	G	.22377+05	.56055+06	.30826+08	.24303+06	NOX	SOX			
WALL FIRED BOILER						NOX	PART	POM HI		
EASTERN BITUMIN.	G	.14150+08	.44094+09	.10357+12	.18913+09	NOX	SOX	PART	BE	CR
						AL				
CENTRAL BITUMIN.	G	.14234+08	.44327+09	.62771+11	.19014+09	NOX	SOX	PART	BE	CR
						AL				
WESTERN BITUMIN.	G	.14128+08	.44040+09	.34190+11	.18890+09	NOX	SOX	PART	BE	CR
						AL				
LIGNITE	G	.18368+08	.50728+09	.65592+09	.16504+09	NOX	SOX	PART	BA	BE
						CR	AL			
HIGH S RES. OIL	G	.17397+06	.46337+07	.30745+09	.32066+07	NOX	SOX	CR	NI	V
MED S RES. OIL	G	.14991+06	.39691+07	.66251+09	.27468+07	NOX	SOX	CR	NI	V
LOW S RES. OIL	G	.14054+06	.37219+07	.80259+09	.25759+07	NOX	SOX	CR	NI	V
DISTILLATE OIL	G	.47352+04	.12716+06	.46437+07	.56154+05	NOX	SOX			
NATURAL GAS	G	.12007+05	.30490+06	.10795+09	.13210+06	NOX				
OPPOSED WALL BOILER										
EASTERN BITUMIN.	G	.51099+08	.10460+10	.19601+11	.45981+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CD
CENTRAL BITUMIN.	G	.51148+08	.10467+10	.11825+11	.46014+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CD
WESTERN BITUMIN.	G	.50998+08	.10463+10	.64778+10	.45906+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CD
LIGNITE	G	.66258+08	.12863+10	.91474+09	.43228+09	NOX	SOX	PART	BA	BE
						CR	CU	NI	AL	
HIGH S RES. OIL	G	.15005+07	.32520+08	.17472+09	.22594+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
MED S RES. OIL	G	.12068+07	.24774+08	.33577+09	.17252+08	SE				
						NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
LOW S RES. OIL	G	.11050+07	.22064+08	.38776+09	.15357+08	SE				
						NOX	SOX	PART	CR	CO

TABLE G-5. Continued

SOURCE		1985 -- SUMMARY ---------- IMPACT FACTORS ---------- SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% MEG
DISTILLATE OIL	G	.80462+05	.20885+07	.13564+07	.92386+06	CU SE NOX SOX
NATURAL GAS	G	.12804+06	.31821+07	.12325+09	.13802+07	NOX POM HI
CYCLONE BOILER						
EASTERN BITUMIN.	G	.41187+08	.88834+09	.36059+10	.38852+09	NOX SOX PART BE CR
CENTRAL BITUMIN.	G	.41319+08	.89046+09	.29663+11	.38947+09	CU PB NI AL CD NOX SOX PART BE CR
LIGNITE	G	.53757+08	.10855+10	.29435+10	.36328+09	CU PB NI AL CD NOX SOX PART BA BE CR AL
HIGH S RES. OIL	G	.27524+06	.62532+07	.21932+08	.43402+07	NOX SOX CR NI V
MED S RES. OIL	G	.23557+06	.51881+07	.40059+08	.36033+07	NOX SOX CR NI V
LOW S RES. OIL	G	.22147+06	.48007+07	.50564+08	.33354+07	NOX SOX CR NI V
NATURAL GAS	G	.95569+04	.24251+06	.22185+07	.10507+06	NOX
VERTICAL + STOKER BOILER						
ANTHRACITE	G	.19131+07	.24298+09	.18810+11	.50127+08	BE CR
EASTERN BITUMIN.	G	.12739+07	.23250+09	.19407+11	.96075+08	SOX BE
CENTRAL BITUMIN.	G	.12775+07	.23260+09	.19416+11	.96121+08	SOX BE
LIGNITE	G	.16730+07	.23891+09	.11704+10	.72843+08	PART BE
PACKAGED BOILERS						
WALL FIRED W-TUBE >29 MW						
DISTILLATE OIL	G	.81474+03	.23057+05	.21209+07	.15717+05	NOX SOX
NATURAL GAS	G	.11116+04	.29954+05	.16055+08	.12360+05	NOX
PROCESS GAS	G	.11116+04	.29954+05	.22483+07	.12360+05	NOX
BIT/LIG COAL	G	.30979+07	.26200+09	.72550+11	.13255+09	NOX SOX PART BE CR AL
RESIDUAL OIL	G	.59498+05	.22292+07	.93794+09	.92739+06	NOX SOX CR NI V
STOKER W-TUBE >29 MW						
BIT/LIG COAL	G	.19955+07	.24924+09	.71252+11	.91627+08	NOX SOX PART BE CR AL
SINGLE BURNER W-T <29 MW						
DISTILLATE OIL	G	.15613+02	.47464+03	.24973+06	.17168+03	SOX
NATURAL GAS	G	.29600+02	.81414+03	.14543+07	.10805+03	NOX
PROCESS GAS	G	.59892+02	.16282+04	.17314+06	.21673+03	NOX
RESIDUAL OIL	G	.38236+04	.12731+06	.30619+09	.40869+05	NOX SOX CR NI V
SCOTCH FIRETUBE <29 MW						
DISTILLATE OIL	G	.84466+03	.18538+05	.13873+09	.68602+04	POM HI
NATURAL GAS	G	.44850+04	.96981+05	.34318+09	.13735+05	POM HI
PROCESS GAS	G	.85918+04	.18513+06	.80036+07	.26246+05	NOX POM HI
RESIDUAL OIL	G	.19373+04	.50882+05	.61830+09	.16621+05	NOX SOX POM HI CR NI V
FIREBOX FIRETUBE <29 MW						
DISTILLATE OIL	G	.75353+03	.16533+05	.12001+09	.61187+04	POM HI
NATURAL GAS	G	.00000	.00000	.00000	.00000	
PROCESS GAS	G	.62102+01	.22603+03	.94790+04	.29992+02	NOX
RESIDUAL OIL	G	.17281+04	.45400+05	.38052+09	.14830+05	SOX POM HI CR NI V
STOKER FIRED W-TUBE <29 MW						
ANTHRACITE	G	.12952+07	.23293+09	.52034+10	.56887+08	NOX SOX PART BE CR CO CU NI
BIT/LIG COAL	G	.88035+06	.22623+09	.62278+12	.93273+08	NOX SOX PART BE CR

TABLE G-5. Continued

SOURCE		1985 -- SUMMARY IMPACT FACTORS				POLLUTANTS EXCEEDING 10% MEG
		SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	
CAST IRON BOILERS						CU NI AL CD
DISTILLATE OIL	G	.00000	.00000	.00000	.00000	
NATURAL GAS	G	.00000	.00000	.00000	.00000	
RESIDUAL OIL	G	.45852+02	.18563+04	.34173+08	.77004+03	NI V
STOKER F-T BOILER <29 MW						
ANTHRACITE	G	.13500+06	.10842+09	.38120+11	.26124+08	SOX PART POM HI BE CR CO
BIT/LIG COAL	G	.77069+05	.60991+08	.48389+12	.25052+08	SOX PART POM HI BE CR AL
HRT BOILERS <29 MW						
DISTILLATE OIL	G	.75353+03	.16533+05	.78319+08	.61187+04	POM HI
NATURAL GAS	G	.00000	.00000	.00000	.00000	
RESIDUAL OIL	G	.17281+04	.45400+05	.23119+09	.14830+05	SOX POM HI CR NI V
RES/COMM STEAM + HOT WAT						
ANTHRACITE	D	.00000	.00000	.00000	.00000	
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
BIT/LIG COAL	D	.00000	.00000	.00000	.00000	
RESIDUAL OIL	D	.00000	.00000	.00000	.00000	
WARM AIR FURNACES						
WARM AIR CENTRAL FURNACE						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
OIL	D	.00000	.00000	.00000	.00000	
WARM AIR SPACE HEATER						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
OIL	D	.00000	.00000	.00000	.00000	
MISCELLANEOUS COMBUSTION						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
GAS TURBINES						
SIMPLE CYCLE >15 MW						
DISTILLATE OIL	G	.55069+04	.12183+06	.20643+08	.64830+05	NOX SOX HC PART
NATURAL GAS	G	.29815+04	.62751+05	.11567+08	.45298+05	NOX SOX HC PART
SIMPLE CYCLE 3.7-15 MW						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
SIMPLE CYCLE <3.7 MW						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
RECIPROCATING I/C ENGINE						
C. I. >75 KW/CYL						
DISTILLATE OIL	G	.39494+03	.82779+04	.80363+07	.19715+04	NOX SOX HC PART
DUAL (OIL + GAS)	G	.11047+04	.19134+05	.24962+08	.47107+04	NOX HC
S. I. >75 KW/CYL						
NATURAL GAS	G	.15395+04	.27027+05	.10805+09	.53626+04	NOX HC
C. I. 75KW-75KW/CYL						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
S. I. 75KW-75KW/CYL						
NATURAL GAS	D	.00000	.00000	.00000	.00000	

TABLE G-5. Concluded

SOURCE		1985 -- SUMMARY IMPACT FACTORS SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% MEG			
S. I. GASOLINE <75 MW	D	.00000	.00000	.00000	.00000				
GASOLINE	D	.00000	.00000	.00000	.00000				
IND. PROCESS COMBUSTION									
CEMENT KILNS									
PROCESSED MAT'L	G	.12286+04	.23669+05	.32159+08	.13571+05	SOX	PART		
GLASS MELTING FURNACES									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
GLASS ANNEALING LEHRS									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
COKE OVEN UNDERFIRE									
PROCESSED MAT'L	G	.46617+04	.86553+05	.33787+09	.21040+05	SOX	PART		
STEEL SINTERING MACHINES									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
OPEN HEARTH FURNCE (OIL)									
PROCESSED MAT'L	G	.26306+03	.49510+04	.19193+08	.23727+04	PART			
BRICK + CERAMIC KILNS									
PROCESSED MAT'L	G	.16372+04	.30311+05	.23873+09	.73720+04	PART			
CAT CRACKING (FCCU)									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
REFINERY FLARES									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
IRON + STEEL FLARES									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
REF. HTR.-NAT. DRAFT.GAS									
PROCESSED MAT'L	G	.28311+04	.52877+05	.26210+08	.22850+05	NOX	HC	PART	
REF. HTR.-NAT. DRAFT.OIL									
PROCESSED MAT'L	G	.72384+04	.14753+06	.16637+08	.63356+05	NOX	SOX	HC	PART
REF. HTR.-FOR. DRAFT.GAS									
PROCESSED MAT'L	G	.34319+04	.67439+05	.38260+07	.29035+05	NOX	HC	PART	
REF. HTR.-FOR. DRAFT.OIL									
PROCESSED MAT'L	G	.78047+04	.16123+06	.57053+07	.69176+05	NOX	SOX	HC	PART

*FIN

TABLE G-6. POLLUTION POTENTIAL OF THE CONSERVATION ENERGY SCENARIO FOR 2000

SOURCE		2000 -- SUMMARY IMPACT FACTORS				POLLUTANTS EXCEEDING 10% REG				
		SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE					
UTILITY BOILERS										
TANGENTIAL BOILERS										
EASTERN BITUMIN.	G	.38126+08	.86140+09	.16417+12	.37567+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CD	
CENTRAL BITUMIN.	G	.38135+08	.86143+09	.99128+11	.37569+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CD	
WESTERN BITUMIN.	G	.38029+08	.85972+09	.54248+11	.37492+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CD	
LIGNITE	G	.49325+08	.10357+10	.30475+10	.34524+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CD	
HIGH S RES. OIL	G	.14773+07	.31697+08	.43360+09	.22027+08	NOX	SOX	PART	BA	BE
						CR	AL			
MED S RES. OIL	G	.12334+07	.25267+08	.86841+09	.17576+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
LOW S RES. OIL	G	.11336+07	.22592+08	.10044+10	.15725+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
DISTILLATE OIL	G	.35574+05	.95522+06	.15249+07	.42182+06	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
WALL FIRED BOILER										
EASTERN BITUMIN.	G	.15936+08	.49559+09	.12709+12	.21259+09	NOX	SOX	PART	BE	CR
						AL				
CENTRAL BITUMIN.	G	.16010+08	.49764+09	.77096+11	.21348+09	NOX	SOX	PART	BE	CR
						AL				
WESTERN BITUMIN.	G	.15883+08	.49428+09	.41967+11	.21203+09	NOX	SOX	PART	BE	CR
						AL				
LIGNITE	G	.20674+08	.56999+09	.80896+09	.16547+09	NOX	SOX	PART	BA	BE
						CR	AL			
HIGH S RES. OIL	G	.18459+06	.49103+07	.32306+09	.33981+07	NOX	SOX	CR	NI	V
MED S RES. OIL	G	.16415+06	.43581+07	.72113+09	.30161+07	NOX	SOX	CR	NI	V
LOW S RES. OIL	G	.15568+06	.41230+07	.68157+09	.28535+07	NOX	SOX	CR	NI	V
DISTILLATE OIL	G	.36146+04	.98094+05	.35482+07	.43296+05	NOX	SOX			
OPPOSED WALL BOILER										
EASTERN BITUMIN.	G	.57730+08	.11828+10	.24195+11	.51902+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CD
CENTRAL BITUMIN.	G	.57767+08	.11833+10	.14593+11	.51925+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CD
WESTERN BITUMIN.	G	.57577+08	.11802+10	.79899+10	.51784+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CD
LIGNITE	G	.74979+08	.14548+10	.11316+10	.48693+09	NOX	SOX	PART	BA	BE
						CR	CU	NI	AL	
HIGH S RES. OIL	G	.15596+07	.33186+08	.17684+09	.23066+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
MED S RES. OIL	G	.13117+07	.26691+08	.35857+09	.18570+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
LOW S RES. OIL	G	.12153+07	.24143+08	.42094+09	.16806+08	NOX	SUX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				

TABLE G-6. Continued

SOURCE		2000 -- SUMMARY IMPACT FACTORS				POLLUTANTS EXCEEDING 10% MEG				
		SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE					
DISTILLATE OIL	G	.67988+05	.17770+07	.11491+07	.78578+06	NOX	SOX			
CYCLONE BOILER										
CENTRAL BITUMIN.	G	.46269+08	.99702+09	.24561+11	.43608+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CD
LIGNITE	G	.60198+08	.12154+10	.24269+10	.40676+09	NOX	SOX	PART	BA	BE
						CR	AL			
HIGH S RES. OIL	G	.30821+06	.70015+07	.17190+08	.48596+07	NOX	SOX	CR	NI	V
MED S RES. OIL	G	.26379+06	.58090+07	.34659+08	.40345+07	NOX	SOX	CR	NI	V
LOW S RES. OIL	G	.29801+06	.53752+07	.41518+08	.37345+07	NOX	SOX	CR	NI	V
VERTICAL + STOKER BOILER										
ANTHRACITE	G	.21423+07	.27206+09	.82452+10	.56126+08	BE	CR			
EASTERN BITUMIN.	G	.14265+07	.26032+09	.16050+11	.10757+09	SOX	BE			
CENTRAL BITUMIN.	G	.14306+07	.26044+09	.16058+11	.10762+09	SOX	BE			
LIGNITE	G	.18734+07	.26750+09	.93607+09	.81561+08	PART	BE			
PACKAGED BOILERS										
WALL FIRED W-TUBE >29 MW										
DISTILLATE OIL	G	.12280+04	.34235+05	.32590+07	.23343+05	NOX	SOX			
NATURAL GAS	G	.56436+03	.15486+05	.10041+08	.63838+04	NOX				
PROCESS GAS	G	.56436+03	.15486+05	.14062+07	.63838+04	NOX				
BIT/LIG COAL	G	.34536+07	.29301+09	.63563+11	.14823+09	SOX	PART	BE	CR	AL
RESIDUAL OIL	G	.66950+05	.25053+07	.10902+10	.10423+07	NOX	SOX	CR	NI	V
STOKER W-TUBE >29 MW										
BIT/LIG COAL	G	.22220+07	.27320+09	.62437+11	.10248+09	SOX	PART	BE	CR	AL
SINGLE BURNER W-T <29 MW										
DISTILLATE OIL	G	.17483+02	.53144+03	.28933+06	.19223+03	SOX				
NATURAL GAS	G	.32563+02	.90699+03	.19600+07	.12026+03	NOX				
PROCESS GAS	G	.59666+02	.16248+04	.20913+06	.21618+03	NOX				
RESIDUAL OIL	G	.43087+04	.14335+06	.35657+09	.46020+05	NOX	SOX	CR	NI	V
SCOTCH FIRETUBE <29 MW										
DISTILLATE OIL	G	.94585+03	.20756+05	.16064+09	.76813+04	POM HI				
NATURAL GAS	G	.50223+04	.10859+06	.46518+09	.15379+05	POM HI				
PROCESS GAS	G	.96100+04	.20698+06	.10835+08	.29347+05	NOX	POM HI			
RESIDUAL OIL	G	.21647+04	.56839+05	.71394+09	.18567+05	SOX	POM HI	CR	NI	V
FIREBOX FIRETUBE <29 MW										
DISTILLATE OIL	G	.84361+03	.18512+05	.13896+09	.68510+04	POM HI				
NATURAL GAS	G	.00000	.00000	.00000	.00000					
PROCESS GAS	G	.00000	.00000	.00000	.00000					
RESIDUAL OIL	G	.19351+04	.50833+05	.99069+09	.16604+05	SOX	POM HI	CR	NI	V
STOKER FIRED W-TUBE <29 MW										
ANTHRACITE	G	.14481+07	.26081+09	.45662+10	.63694+08	NOX	SOX	PART	BE	CR
						CO	CU	NI		
BIT/LIG COAL	G	.98579+06	.25330+09	.54640+12	.10443+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CD	
CAST IRON BOILERS										
DISTILLATE OIL	G	.00000	.00000	.00000	.00000					
NATURAL GAS	G	.00000	.00000	.00000	.00000					
RESIDUAL OIL	G	.51345+02	.20785+04	.39573+08	.86219+03	NI	V			
STOKER F-T BOILER <29 MW										
ANTHRACITE	G	.15117+06	.12140+09	.53431+11	.29251+08	SOX	PART	POM HI	BE	CR
						CO				
BIT/LIG COAL	G	.86302+05	.68289+08	.42442+12	.28050+08	SOX	PART	POM HI	BE	CR

TABLE G-6. Continued

SOURCE		2000 -- SUMMARY IMPACT FACTORS SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% MEG
HRT BOILERS <29.3 MW						AL
DISTILLATE OIL	G	.84381+03	.18512+05	.90686+08	.68510+04	POM HI
NATURAL GAS	G	.00000	.00000	.00000	.00000	
RESIDUAL OIL	G	.19351+04	.50833+05	.26771+09	.16604+05	SOX POM HI CR NI V
RES/COMM STEAM + HOT WAT						
ANTHRACITE	D	.00000	.00000	.00000	.00000	
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
BIT/LIG COAL	D	.00000	.00000	.00000	.00000	
RESIDUAL OIL	D	.00000	.00000	.00000	.00000	
WARM AIR FURNACES						
WARM AIR CENTRAL FURNACE						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
OIL	D	.00000	.00000	.00000	.00000	
WARM AIR SPACE HEATER						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
OIL	D	.00000	.00000	.00000	.00000	
MISCELLANEOUS COMBUSTION						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
GAS TURBINES						
SIMPLE CYCLE >15 MW						
DISTILLATE OIL	G	.31944+04	.65815+05	.39660+08	.35131+05	NOX SOX HC PART
SIMPLE CYCLE 3.7-15 MW						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
SIMPLE CYCLE <3.7 MW						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
RECIPROCATING I/C ENGINE						
C. I. >75 KW/CYL						
DISTILLATE OIL	G	.36807+03	.74961+04	.19636+08	.17937+04	NOX SOX HC PART
DUAL (OIL + GAS)	G	.12008+04	.20514+05	.36857+08	.50635+04	NOX HC
S. I. >75 KW/CYL						
NATURAL GAS	G	.17239+04	.30262+05	.45455+08	.60045+04	NOX HC
C. I. 75KW-75KW/CYL						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
S. I. 75KW-75KW/CYL						
GASOLINE	D	.00000	.00000	.00000	.00000	
S. I. <75 KW						
GASOLINE	D	.00000	.00000	.00000	.00000	
IND. PROCESS COMBUSTION						
CEMENT KILNS						
PROCESSED MAT'L	G	.13758+04	.26502+05	.40425+08	.15195+05	SOX PART
GLASS MELTING FURNACES						
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000	
GLASS ANNEALING LEHRS						
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000	

$$

TABLE G-6. Concluded

SOURCE		2000 -- SUMMARY IMPACT FACTORS SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% REG			
COKE OVEN UNDERFIRE PROCESSED MAT'L	G	.52202+04	.96910+05	.42476+09	.23558+05	SOX	PART		
STEEL SINTERING MACHINES PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
OPEN HEARTH FURNCE (OIL) PROCESSED MAT'L	G	.29458+03	.55435+04	.24132+08	.26566+04	PART			
BRICK + CERAMIC KILNS PROCESSED MAT'L	G	.18334+04	.33939+05	.30010+09	.82544+04	PART			
CAT CRACKING (FCCU) PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
REFINERY FLARES PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
IRON + STEEL FLARES PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
REF. HTR.-NAT. DRAFT.GAS PROCESSED MAT'L	G	.29697+04	.54217+05	.30236+08	.23469+05	NOX	HC	PART	
REF. HTR.-NAT. DRAFT.OIL PROCESSED MAT'L	G	.74546+04	.14892+06	.18881+08	.64040+05	NOX	SOX	HC	PART
REF. HTR.-FOR. DRAFT.GAS PROCESSED MAT'L	G	.35265+04	.67841+05	.43260+07	.29252+05	NOX	HC	PART	
REF. HTR.-FOR. DRAFT.OIL PROCESSED MAT'L	G	.79172+04	.16000+06	.63871+07	.68750+05	NOX	SOX	HC	PART

*FIN

TABLE G-7. POLLUTION POTENTIAL OF THE ELECTRIFICATION ENERGY SCENARIO FOR 1985

SOURCE		1985 -- SUMMARY IMPACT FACTORS				POLLUTANTS EXCEEDING 10% MEG				
		SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE					
UTILITY BOILERS										
TANGENTIAL BOILERS										
EASTERN BITUMIN.	G	.33999+08	.76846+09	.17480+12	.33513+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CO	
CENTRAL BITUMIN.	G	.34039+08	.76911+09	.10562+12	.33542+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CO	
WESTERN BITUMIN.	G	.33953+08	.76772+09	.57820+11	.33480+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CD	
LIGNITE	G	.43952+08	.92328+09	.32432+10	.30775+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CD	
HIGH S RES. OIL	G	.13732+07	.29654+08	.26877+09	.20604+08	NOX	SOX	PART	BA	BE
						CR	AL			
MED S RES. OIL	G	.11068+07	.22674+08	.51652+09	.15772+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
LOW S RES. OIL	G	.10145+07	.20234+08	.59609+09	.14084+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
DISTILLATE OIL	G	.33937+05	.90990+06	.96263+06	.40184+06	NOX	SOX	PART	CR	CO
NATURAL GAS	G	.25020+05	.62733+06	.24396+08	.27197+06	CU	PB	NI	V	AL
						SE				
WALL FIRED BOILER						NOX	SOX			
EASTERN BITUMIN.	G	.14213+08	.44220+09	.13533+12	.18969+09	NOX	PART	POM NI		
						AL				
CENTRAL BITUMIN.	G	.14265+08	.44362+09	.82014+11	.19030+09	NOX	SOX	PART	BE	CR
						AL				
WESTERN BITUMIN.	G	.14164+08	.44096+09	.44689+11	.18915+09	NOX	SOX	PART	BE	CR
						AL				
LIGNITE	G	.18434+08	.50853+09	.85829+09	.16546+09	NOX	SOX	PART	BE	CR
						AL				
HIGH S RES. OIL	G	.17397+06	.46337+07	.20201+09	.32066+07	NOX	SOX	PART	BA	BE
MED S RES. OIL	G	.14991+06	.39691+07	.43517+09	.27468+07	CR	AL			
LOW S RES. OIL	G	.14054+06	.37219+07	.52740+09	.25759+07	NOX	SOX	CR	NI	V
DISTILLATE OIL	G	.47352+04	.12716+06	.30501+07	.56154+05	NOX	SOX	CR	NI	V
NATURAL GAS	G	.15251+05	.38608+06	.96689+08	.16729+06	NOX	SOX	CR	NI	V
OPPOSED WALL BOILER						NOX	SOX			
EASTERN BITUMIN.	G	.51470+08	.10549+10	.25754+11	.46287+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CD
CENTRAL BITUMIN.	G	.51530+08	.10559+10	.15540+11	.46331+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CD
WESTERN BITUMIN.	G	.51344+08	.10527+10	.85049+10	.46191+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CD
LIGNITE	G	.66804+08	.12965+10	.12035+10	.43571+09	NOX	SOX	PART	BA	BE
						CR	CU	NI	AL	
HIGH S RES. OIL	G	.15005+07	.32520+08	.11480+09	.22594+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
MED S RES. OIL	G	.12068+07	.24774+08	.22056+09	.17232+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
LOW S RES. OIL	G	.11050+07	.22064+08	.25477+09	.15557+08	NOX	SOX	PART	CR	CO

TABLE G-7. Continued

SOURCE		1985 -- SUMMARY ---------- IMPACT FACTORS ---------- SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% MEG
DISTILLATE OIL	G	.60462+05	.20885+07	.89132+06	.92386+06	CU PB NI V AL
NATURAL GAS	G	.16209+06	.40196+07	.11017+09	.17437+07	SE NOX SOX
CYCLONE BOILER						NOX POM HI
EASTERN BITUMIN.	G	.41187+08	.88834+09	.36059+10	.38852+09	NOX SOX PART BE CR
CENTRAL BITUMIN.	G	.41319+08	.89046+09	.29663+11	.38947+09	CU PB NI AL CD
LIGNITE	G	.53757+08	.10855+10	.29435+10	.36328+09	NOX SOX PART BE CR
HIGH S RES. OIL	G	.27524+06	.62532+07	.21932+08	.43402+07	CU PB NI AL CD
MED S RES. OIL	G	.23557+06	.51881+07	.40059+08	.36033+07	NOX SOX PART BA BE
LOW S RES. OIL	G	.22147+06	.48007+07	.50564+08	.33354+07	CR AL
NATURAL GAS	G	.95569+04	.24251+06	.22185+07	.10507+06	NOX SOX CR NI V
VERTICAL + STOKER BOILER						NOX SOX CR NI V
ANTHRACITE	G	.19131+07	.24298+09	.10010+11	.50127+08	NOX SOX CR NI V
EASTERN BITUMIN.	G	.12739+07	.23250+09	.19407+11	.96075+08	BE CR
CENTRAL BITUMIN.	G	.12775+07	.23260+09	.19416+11	.96121+08	SOX BE
LIGNITE	G	.16730+07	.23891+09	.11704+10	.72843+08	SOX BE
PACKAGED BOILERS						PART BE
WALL FIRED W-TUBE >29 MW						
DISTILLATE OIL	G	.16694+04	.45874+05	.41666+07	.31287+05	NOX SOX
NATURAL GAS	G	.11116+04	.29954+05	.16008+08	.12360+05	NOX
PROCESS GAS	G	.11124+04	.29967+05	.22431+07	.12366+05	NOX
BIT/LIG COAL	G	.30981+07	.26200+09	.71162+11	.13255+09	NOX SOX PART BE CR
RESIDUAL OIL	G	.60417+05	.22537+07	.93562+09	.93775+06	AL
STOKER W-TUBE >29 MW						NOX SOX CR NI V
BIT/LIG COAL	G	.19956+07	.24924+09	.69886+11	.91628+08	NOX SOX PART BE CR
SINGLE BURNER W-T <29 MW						AL
DISTILLATE OIL	G	.15613+02	.47464+03	.24645+06	.17168+03	SOX
NATURAL GAS	G	.29600+02	.81414+03	.14504+07	.10805+03	NOX
PROCESS GAS	G	.59908+02	.16285+04	.17269+06	.21677+03	NOX
RESIDUAL OIL	G	.38894+04	.12915+06	.30647+09	.41467+05	NOX SOX CR NI V
SCOTCH FIRETUBE <29 MW						
DISTILLATE OIL	G	.84466+03	.18538+05	.13685+09	.68602+04	POM HI
NATURAL GAS	G	.44850+04	.96981+05	.34222+09	.13735+05	POM HI
PROCESS GAS	G	.85918+04	.18513+06	.79808+07	.26246+05	NOX POM HI
RESIDUAL OIL	G	.19373+04	.50882+05	.60998+09	.16621+05	NOX SOX POM HI CR NI
FIREBOX FIRETUBE <29 MW						V
DISTILLATE OIL	G	.75353+03	.16533+05	.11838+09	.61187+04	POM HI
NATURAL GAS	G	.00000	.00000	.00000	.00000	
PROCESS GAS	G	.82114+01	.22605+03	.94529+04	.29995+02	NOX
RESIDUAL OIL	G	.17281+04	.45400+05	.37536+09	.14830+05	SOX POM HI CR NI V
STOKER FIRED W-TUBE <29 MW						
ANTHRACITE	G	.12932+07	.25293+09	.51043+10	.56887+08	NOX SOX PART BE CR
BIT/LIG COAL	G	.88035+06	.22623+09	.61131+12	.93273+08	CO CU NI
						NOX SOX PART BE CR

TABLE G-7. Continued

SOURCE		1985 -- SUMMARY IMPACT FACTORS				POLLUTANTS EXCEEDING 10% MEG				
		SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	CU	NI	AL	CD	
CAST IRON BOILERS										
DISTILLATE OIL	G	.00000	.00000	.00000	.00000					
NATURAL GAS	G	.00000	.00000	.00000	.00000					
RESIDUAL OIL	G	.45852+02	.18563+04	.33714+08	.77004+03	NI	V			
STOKER F-T BOILER <29 MW										
ANTHRACITE	G	.13500+06	.10842+09	.37394+11	.26124+08	SOX CO	PART	POM HI	BE	CR
BIT/LIG COAL	G	.77069+05	.60991+08	.47467+12	.25052+08	SOX AL	PART	POM HI	BE	CR
HRT BOILERS <29 MW										
DISTILLATE OIL	G	.75353+03	.16533+05	.77254+08	.61187+04	POM HI				
NATURAL GAS	G	.00000	.00000	.00000	.00000					
RESIDUAL OIL	G	.17201+04	.45400+05	.22806+09	.14830+05	SOX	POM HI	CR	NI	V
RES/COMM STEAM + HOT WAT										
ANTHRACITE	D	.00000	.00000	.00000	.00000					
DISTILLATE OIL	D	.00000	.00000	.00000	.00000					
NATURAL GAS	D	.00000	.00000	.00000	.00000					
BIT/LIG COAL	D	.00000	.00000	.00000	.00000					
RESIDUAL OIL	D	.00000	.00000	.00000	.00000					
WARM AIR FURNACES										
WARM AIR CENTRAL FURNACE										
NATURAL GAS	D	.00000	.00000	.00000	.00000					
OIL	D	.00000	.00000	.00000	.00000					
WARM AIR SPACE HEATER										
NATURAL GAS	D	.00000	.00000	.00000	.00000					
OIL	D	.00000	.00000	.00000	.00000					
MISCELLANEOUS COMBUSTION										
NATURAL GAS	D	.00000	.00000	.00000	.00000					
GAS TURBINES										
SIMPLE CYCLE >15 MW										
DISTILLATE OIL	G	.42901+04	.93043+05	.25256+08	.49559+05	NOX	SOX	HC	PART	
NATURAL GAS	G	.24474+04	.50044+05	.14798+08	.36146+05	NOX	SOX	HC	PART	
SIMPLE CYCLE 3.7-15 MW										
DISTILLATE OIL	D	.00000	.00000	.00000	.00000					
NATURAL GAS	D	.00000	.00000	.00000	.00000					
SIMPLE CYCLE <3.7 MW										
DISTILLATE OIL	D	.00000	.00000	.00000	.00000					
NATURAL GAS	D	.00000	.00000	.00000	.00000					
RECIPROCATING I/C ENGINE										
C. I. >75 KW/CYL										
DISTILLATE OIL	G	.39310+03	.82483+04	.97218+07	.19641+04	NOX	SOX	HC	PART	
DUAL (OIL + GAS)	G	.11045+04	.19130+05	.26601+08	.47095+04	NOX	HC			
S. I. >75 KW/CYL										
NATURAL GAS	G	.15395+04	.27027+05	.10805+09	.53626+04	NOX	HC			
C. I. 75 KW-75KW/CYL										
DISTILLATE OIL	D	.00000	.00000	.00000	.00000					
S. I. 75KW-75KW/CYL										
NATURAL GAS	D	.00000	.00000	.00000	.00000					

TABLE G-7. Concluded

SOURCE		1985 -- SUMMARY IMPACT FACTORS				POLLUTANTS EXCEEDING 10% MEG			
		SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE				
GASOLINE	D	.00000	.00000	.00000	.00000				
S. I. <75 KW									
GASOLINE	D	.00000	.00000	.00000	.00000				
IND. PROCESS COMBUSTION									
CEMENT KILNS									
PROCESSED MAT'L	G	.12286+04	.23669+05	.38635+08	.13571+05	SOX	PART		
GLASS MELTING FURNACES									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
GLASS ANNEALING LEHRS									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
COKE OVEN UNDERFIRE									
PROCESSED MAT'L	G	.46617+04	.86553+05	.40610+09	.21040+05	SOX	PART		
STEEL SINTERING MACHINES									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
OPEN HEARTH FURNCE (OIL)									
PROCESSED MAT'L	G	.26306+03	.49510+04	.23070+08	.23727+04	PART			
BRICK + CERAMIC KILNS									
PROCESSED MAT'L	G	.16372+04	.30311+05	.28689+09	.73720+04	PART			
CAT CRACKING (FCCU)									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
REFINERY FLARES									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
IRON + STEEL FLARES									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
REF. HTR.-NAT. DRAFT.GAS									
PROCESSED MAT'L	G	.27662+04	.51149+05	.30510+08	.22119+05	NOX	HC	PART	
REF. HTR.-NAT. DRAFT.OIL									
PROCESSED MAT'L	G	.70535+04	.14263+06	.19346+08	.61284+05	NOX	SOX	HC	PART
REF. HTR.-FOR. DRAFT.GAS									
PROCESSED MAT'L	G	.33152+04	.64347+05	.43898+07	.27728+05	NOX	HC	PART	
REF. HTR.-FOR. DRAFT.OIL									
PROCESSED MAT'L	G	.75715+04	.15506+06	.66259+07	.66565+05	NOX	SOX	HC	PART

*FIN

TABLE G-8. POLLUTION POTENTIAL OF THE ELECTRIFICATION ENERGY SCENARIO FOR 2000

SOURCE		2000 -- SUMMARY IMPACT FACTORS				POLLUTANTS EXCEEDING 10% REG				
		SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE					
UTILITY BOILERS										
TANGENTIAL BOILERS										
EASTERN BITUMIN.	G	.37826+08	.85581+09	.25569+12	.37520+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CO	
CENTRAL BITUMIN.	G	.37895+08	.85690+09	.15453+12	.37569+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CO	
WESTERN BITUMIN.	G	.37741+08	.85383+09	.84469+11	.37234+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CO	
LIGNITE	G	.48966+08	.10289+10	.47456+10	.34295+09	NOX	SOX	PART	BA	BE
						CR	AL			
HIGH S RES. OIL	G	.13555+07	.28521+08	.62962+09	.19828+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
MED S RES. OIL	G	.12035+07	.24965+08	.13559+10	.17008+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
LOW S RES. OIL	G	.11353+07	.22586+08	.16202+10	.15721+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
DISTILLATE OIL	G	.35215+05	.94945+06	.24456+07	.41919+06	NOX	SOX			
NATURAL GAS	G	.28018+05	.70240+06	.12706+08	.30452+06	NOX	PART	POM	HI	
WALL FIRED BOILER										
EASTERN BITUMIN.	G	.15820+08	.49290+09	.19811+12	.21142+09	NOX	SOX	PART	BE	CR
						AL				
CENTRAL BITUMIN.	G	.15855+08	.49362+09	.11988+12	.21182+09	NOX	SOX	PART	BE	CR
						AL				
WESTERN BITUMIN.	G	.15793+08	.49217+09	.65507+11	.21111+09	NOX	SOX	PART	BE	CR
						AL				
LIGNITE	G	.20574+08	.56805+09	.12589+10	.18462+09	NOX	SOX	PART	BA	BE
						CR	AL			
HIGH S RES. OIL	G	.19124+06	.50934+07	.54054+09	.35247+07	NOX	SOX	CR	NI	V
MED S RES. OIL	G	.15671+06	.41535+07	.11091+10	.28745+07	NOX	SOX	CR	NI	V
LOW S RES. OIL	G	.15311+06	.40540+07	.13986+10	.28057+07	NOX	SOX	CR	NI	V
DISTILLATE OIL	G	.17233+04	.47574+05	.27749+07	.20981+05	NOX	SOX			
NATURAL GAS	G	.12039+05	.30517+06	.35550+08	.13222+06	NOX				
OPPOSED WALL BOILER										
EASTERN BITUMIN.	G	.57193+08	.11727+10	.37606+11	.51455+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CO
CENTRAL BITUMIN.	G	.57235+08	.11734+10	.22683+11	.51485+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CO
WESTERN BITUMIN.	G	.57119+08	.11714+10	.12431+11	.51398+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CO
LIGNITE	G	.74250+08	.14409+10	.17567+10	.48824+09	NOX	SOX	PART	BA	BE
						CR	CU	NI	AL	
HIGH S RES. OIL	G	.14160+07	.29476+08	.25558+09	.20497+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
MED S RES. OIL	G	.12728+07	.25702+08	.55732+09	.17684+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
LOW S RES. OIL	G	.11953+07	.23636+08	.66486+09	.16455+08	NOX	SOX	PART	CR	CO

TABLE G-8. Continued

SOURCE		2000 -- SUMMARY IMPACT FACTORS SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% MEG
DISTILLATE OIL	G	.97928+05	.12700+07	.15183+07	.56120+06	NOX SOX CU PB NI V AL SE
NATURAL GAS	G	.18151+06	.45007+07	.57378+08	.19529+07	NOX POM HI
CYCLONE BOILER						
CENTRAL BITUMIN.	G	.46269+08	.99702+09	.24541+11	.43608+09	NOX SOX PART BE CR CU PB NI AL CO
LIGNITE	G	.60198+08	.12154+10	.24269+10	.40676+09	NOX SOX PART BA BE CR AL
HIGH S RES. OIL	G	.30821+06	.70015+07	.17190+08	.48596+07	NOX SOX CR NI V
MED S RES. OIL	G	.26379+06	.58090+07	.34659+08	.40345+07	NOX SOX CR NI V
LOW S RES. OIL	G	.24801+06	.53752+07	.41518+08	.37345+07	NOX SOX CR NI V
VERTICAL + STOKER BOILER						
ANTHRACITE	G	.21423+07	.27206+09	.82452+10	.56126+08	BE CR
EASTERN BITUMIN.	G	.14265+07	.26032+09	.16050+11	.10757+09	SOX BE
CENTRAL BITUMIN.	G	.14306+07	.26044+09	.16058+11	.10762+09	SOX BE
LIGNITE	G	.18734+07	.26750+09	.93607+09	.81561+08	PART BE
PACKAGED BOILERS						
WALL FIRED W-TUBE >29 MW						
DISTILLATE OIL	G	.12305+04	.34276+05	.31449+07	.23371+05	NOX SOX
NATURAL GAS	G	.83802+03	.22838+05	.10661+08	.94182+04	NOX
PROCESS GAS	G	.83802+03	.22838+05	.14932+07	.94182+04	NOX
BIT/LIG COAL	G	.34330+07	.29259+09	.18144+12	.14801+09	NOX SOX PART BE CR AL
RESIDUAL OIL	G	.66954+05	.25054+07	.10511+10	.10423+07	NOX SOX CR NI V
STOKER W-TUBE >29 MW						
BIT/LIG COAL	G	.22042+07	.27282+09	.17821+12	.10233+09	NOX SOX PART BE CR AL
SINGLE BURNER W-T <29 MW						
DISTILLATE OIL	G	.17483+02	.53144+03	.27896+06	.19223+03	SOX
NATURAL GAS	G	.32976+02	.90882+03	.14139+07	.12056+03	NOX
PROCESS GAS	G	.59896+02	.16285+04	.15093+06	.21676+03	NOX
RESIDUAL OIL	G	.42650+04	.19213+06	.34082+09	.45625+05	SOX CR NI V
SCOTCH FIRETUBE <29 MW						
DISTILLATE OIL	G	.98585+03	.20756+05	.15486+09	.76813+04	POM HI
NATURAL GAS	G	.50223+04	.10859+06	.33482+09	.15379+05	POM HI
PROCESS GAS	G	.96154+04	.20713+06	.78036+07	.29367+05	NOX POM HI
RESIDUAL OIL	G	.21647+04	.56639+05	.68838+09	.18567+05	SOX POM HI CR NI V
FIREBOX FIRETUBE <29 MW						
DISTILLATE OIL	G	.84381+03	.18512+05	.13398+09	.68510+04	POM HI
NATURAL GAS	G	.00000	.00000	.00000	.00000	
PROCESS GAS	G	.57627+01	.15985+03	.58307+04	.21172+02	NOX
RESIDUAL OIL	G	.19351+04	.50833+05	.42484+09	.16604+05	SOX POM HI CR NI V
STOKER FIRED W-TUBE <29 MW						
ANTHRACITE	G	.14481+07	.26081+09	.13049+11	.63694+08	NOX SOX PART BE CR CO CU NI
BIT/LIG COAL	G	.98579+06	.25330+09	.15621+13	.10943+09	NOX SOX PART BE CR CU NI AL CO
CAST IRON BOILERS						
DISTILLATE OIL	G	.00000	.00000	.00000	.00000	

TABLE G-8. Continued

SOURCE		2000 -- SUMMARY ---------- IMPACT FACTORS ---------- SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% MEG
RESIDUAL OIL	G	.51345+02	.20785+04	.38154+08	.86219+03	NI V
STOKER F-T BOILER <29 MW						
ANTHRACITE	G	.15117+06	.12140+09	.95584+11	.29251+08	SOX PART POM HI BE CR CO
BIT/LIG COAL	G	.86302+05	.68289+08	.12136+13	.28050+08	SOX PART POM HI BE CR AL
HRT BOILERS <29 MW						
DISTILLATE OIL	G	.84381+03	.18512+05	.87427+08	.68510+04	POM HI
NATURAL GAS	G	.00000	.00000	.00000	.00000	
RESIDUAL OIL	G	.19351+04	.50833+05	.25809+09	.16604+05	SOX POM HI CR NI V
RES/COMM STEAM + HOT WAT						
ANTHRACITE	D	.00000	.00000	.00000	.00000	
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
BIT/LIG COAL	D	.00000	.00000	.00000	.00000	
RESIDUAL OIL	D	.00000	.00000	.00000	.00000	
WARM AIR FURNACES						
WARM AIR CENTRAL FURNACE						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
OIL	D	.00000	.00000	.00000	.00000	
WARM AIR SPACE HEATER						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
OIL	D	.00000	.00000	.00000	.00000	
MISCELLANEOUS COMBUSTION						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
GAS TURBINES						
SIMPLE CYCLE >15 MW						
DISTILLATE OIL	G	.31899+04	.65743+05	.41394+08	.35092+05	NOX SOX HC PART
NATURAL GAS	G	.20055+04	.38327+05	.26251+08	.27721+05	NOX SOX HC PART
SIMPLE CYCLE 3.7-15 MW						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
SIMPLE CYCLE <3.7 MW						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
RECIPROCATING I/C ENGINE						
C. I. >75 KW/CYL						
DISTILLATE OIL	G	.38604+03	.79564+04	.15822+08	.19001+04	NOX SOX HC PART
DUAL (OIL + GAS)	G	.12012+04	.20520+05	.35983+08	.50650+04	NOX HC
S. I. >75 KW/CYL						
NATURAL GAS	G	.17239+04	.30262+05	.45455+08	.60045+04	NOX HC
C. I. 75KW-75KW/CYL						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
S. I. 75KW-75KW/CYL						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
GASOLINE	D	.00000	.00000	.00000	.00000	
S. I. <75 KW						
GASOLINE	D	.00000	.00000	.00000	.00000	

TABLE G-8. Concluded

SOURCE		2000 -- SUMMARY IMPACT FACTORS SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% MEG			
IND. PROCESS COMBUSTION									
CEMENT KILNS									
PROCESSED MAT'L	G	.13758+04	.26502+05	.45983+08	.15195+05	SOX	PART		
GLASS MELTING FURNACES									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
GLASS ANNEALING LEHRS									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
COKE OVEN UNDERFIRE									
PROCESSED MAT'L	G	.52202+04	.96910+05	.48311+09	.23558+05	SOX	PART		
STEEL SINTERING MACHINES									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
OPEN HEARTH FURNCE (OIL)									
PROCESSED MAT'L	G	.29458+03	.55435+04	.27445+08	.26566+04	PART			
BRICK + CERAMIC KILNS									
PROCESSED MAT'L	G	.18334+04	.33939+05	.34133+09	.82544+04	PART			
CAT CRACKING (FCCU)									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
REFINERY FLARES									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
IRON + STEEL FLARES									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
REF. HTR.-NAT. DRAFT.GAS									
PROCESSED MAT'L	G	.29697+04	.54217+05	.34396+08	.23469+05	NOX	HC	PART	
REF. HTR.-NAT. DRAFT.OIL									
PROCESSED MAT'L	G	.74546+04	.14892+06	.21491+08	.64040+05	NOX	SOX	HC	PART
REF. HTR.-FOR. DRAFT.GAS									
PROCESSED MAT'L	G	.35265+04	.67841+05	.49084+07	.29252+05	NOX	HC	PART	
REF. HTR.-FOR. DRAFT.OIL									
PROCESSED MAT'L	G	.79172+04	.16000+06	.72344+07	.68750+05	NOX	SOX	HC	PART

*FIN

TABLE G-9. POLLUTION POTENTIAL OF THE SYNTHETICS ENERGY SCENARIO FOR 1985

SOURCE		1985 -- SUMMARY IMPACT FACTORS				POLLUTANTS EXCEEDING 10X MEG				
		SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE					
UTILITY BOILERS										
TANGENTIAL BOILERS										
EASTERN BITUMIN.	G	.34724+08	.78193+09	.80047+11	.34108+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CO	
CENTRAL BITUMIN.	G	.34723+08	.78176+09	.48309+11	.34101+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CO	
WESTERN BITUMIN.	G	.34561+08	.77902+09	.26419+11	.33979+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CO	
LIGNITE	G	.44600+08	.93522+09	.14782+10	.31179+09	NOX	SOX	PART	BA	BE
						CR	AL			
HIGH S RES. OIL	G	.12328+07	.25988+08	.63540+09	.18066+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
MED S RES. OIL	G	.10867+07	.22169+08	.13619+10	.15423+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
LOW S RES. OIL	G	.10123+07	.20177+08	.16032+10	.14044+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
DISTILLATE OIL	G	.31774+05	.65323+06	.24346+07	.37679+06	NOX	SOX			
NATURAL GAS	G	.21210+05	.53066+06	.35640+08	.23008+06	NOX	PART	POM HI		
WALL FIRED BOILER										
EASTERN BITUMIN.	G	.14413+08	.44639+09	.61492+11	.19153+09	NOX	SOX	PART	BE	CR
						AL				
CENTRAL BITUMIN.	G	.14460+08	.44758+09	.37233+11	.19204+09	NOX	SOX	PART	BE	CR
						AL				
WESTERN BITUMIN.	G	.14337+08	.44430+09	.20262+11	.19062+09	NOX	SOX	PART	BE	CR
						AL				
LIGNITE	G	.18689+08	.51326+09	.39012+09	.16706+09	NOX	SOX	PART	BA	BE
						CR	AL			
HIGH S RES. OIL	G	.15867+06	.42188+07	.49590+09	.29196+07	NOX	SOX	CR	NI	V
MED S RES. OIL	G	.14540+06	.38593+07	.11414+10	.26708+07	NOX	SOX	CR	NI	V
LOW S RES. OIL	G	.13909+06	.36840+07	.14077+10	.25496+07	NOX	SOX	CR	NI	V
DISTILLATE OIL	G	.32915+04	.89270+05	.57709+07	.39403+05	NOX	SOX			
NATURAL GAS	G	.10693+05	.27162+06	.11743+09	.11767+06	NOX				
OPPOSED WALL BOILER										
EASTERN BITUMIN.	G	.52033+08	.10650+10	.11702+11	.46737+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CO
CENTRAL BITUMIN.	G	.52107+08	.10662+10	.70624+10	.46790+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CO
WESTERN BITUMIN.	G	.51935+08	.10635+10	.38665+10	.46667+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CO
LIGNITE	G	.67079+08	.13005+10	.54350+09	.43711+09	NOX	SOX	PART	BA	BE
						CR	CU	NI	AL	
HIGH S RES. OIL	G	.13929+07	.29642+08	.28240+09	.20602+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
MED S RES. OIL	G	.11871+07	.24272+08	.58284+09	.16885+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
LOW S RES. OIL	G	.10853+07	.21563+08	.67167+09	.15010+08	NOX	SOX	PART	CR	CO

TABLE G-9. Continued

SOURCE		1985 -- SUMMARY IMPACT FACTORS				POLLUTANTS EXCEEDING 10% MEQ				
		SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE					
	DISTILLATE OIL	G	.60915+05	.15903+07	.18300+07	.70327+06	CU SE NOX	SUX			
	NATURAL GAS	G	.11427+06	.28390+07	.13431+09	.12314+07	NOX	POM HI			
CYCLONE BOILER											
	EASTERN BITUMIN.	G	.41187+08	.88834+09	.25241+10	.38852+09	NOX CU	SOX PB	PART NI	BE AL	CR CD
	CENTRAL BITUMIN.	G	.41319+08	.89046+09	.20764+11	.38947+09	NOX CU	SUX PB	PART NI	BE AL	CR CD
	LIGNITE	G	.53757+08	.10855+10	.20604+10	.36328+09	NOX CR	SUX AL	PART	BA	BE
	HIGH S RES. OIL	G	.27524+06	.62532+07	.21932+08	.43402+07	NOX	SOX	CR	NI	V
	MED S RES. OIL	G	.23557+06	.51881+07	.40059+08	.36033+07	NOX	SOX	CR	NI	V
	LOW S RES. OIL	G	.22147+06	.48007+07	.50564+08	.33354+07	NOX	SOX	CR	NI	V
	NATURAL GAS	G	.95569+04	.24251+06	.22165+07	.10507+06	NOX				
VERTICAL + STOKER BOILER											
	ANTHRACITE	G	.19131+07	.24298+09	.70072+10	.50127+08	BE	CR			
	EASTERN BITUMIN.	G	.12739+07	.23250+09	.13565+11	.96075+08	SOX	BE			
	CENTRAL BITUMIN.	G	.12775+07	.23260+09	.13591+11	.96121+08	SOX	BE			
	LIGNITE	G	.16750+07	.23691+09	.81930+09	.72843+08	PART	BE			
PACKAGED BOILERS											
WALL FIRED W-TUBE >29 MW											
	DISTILLATE OIL	G	.14931+04	.41124+05	.41209+07	.28046+05	NOX	SOX			
	NATURAL GAS	G	.98321+03	.26600+05	.15688+08	.10974+05	NOX				
	PROCESS GAS	G	.98321+03	.26600+05	.22247+07	.10974+05	NOX	SOX	PART	BE	CR
	BIT/LIG COAL	G	.30733+07	.26148+09	.11015+12	.13228+09	AL NOX	SOX	CR	NI	V
	RESIDUAL OIL	G	.59732+05	.22356+07	.10239+10	.93009+06	NOX	SOX	PART	BE	CR
STOKER W-TUBE >29 MW							AL				
	BIT/LIG COAL	G	.19745+07	.24380+09	.10820+12	.91948+08					
SINGLE BURNER W-T <29 MW											
	DISTILLATE OIL	G	.15613+02	.47464+03	.27190+06	.17168+03	SOX				
	NATURAL GAS	G	.29537+02	.81312+03	.16180+07	.10789+03	NOX				
	PROCESS GAS	G	.53670+02	.14574+04	.17276+06	.19404+03	NOX				
	RESIDUAL OIL	G	.38934+04	.12927+06	.33847+09	.41507+05	NOX	SOX	CR	NI	V
SCOTCH FIRETUBE <29 MW											
	DISTILLATE OIL	G	.84466+03	.18538+05	.15099+09	.68602+04	POM HI				
	NATURAL GAS	G	.44850+04	.96981+05	.38234+09	.13735+05	POM HI				
	PROCESS GAS	G	.85882+04	.18503+06	.89147+07	.26233+05	NOX	POM HI			
	RESIDUAL OIL	G	.19331+04	.50764+05	.67135+09	.16582+05	SOX	POM HI	CR	NI	V
FIREBOX FIRETUBE <29 MW											
	DISTILLATE OIL	G	.75353+03	.16533+05	.13064+09	.61167+04	POM HI				
	NATURAL GAS	G	.00000	.00000	.00000	.00000					
	PROCESS GAS	G	.82395+01	.22746+03	.10624+05	.30165+02	NOX				
	RESIDUAL OIL	G	.17281+04	.45400+05	.41420+09	.14830+05	SOX	POM HI	CR	NI	V
STOKER FIRED W-TUBE <29 MW											
	ANTHRACITE	G	.12932+07	.23293+09	.79173+10	.56887+08	NOX CO	SUX CU	PART NI	BE	CR
	BIT/LIG COAL	G	.88035+06	.22623+09	.94780+12	.93273+08	NOX CU	SOX NI	PART AL	BE CO	CR

TABLE G-9. Continued

SOURCE		1985 -- SUMMARY ---------- IMPACT FACTORS ---------- SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% MEG
CAST IRON BOILERS						
DISTILLATE OIL	G	.00000	.00000	.00000	.00000	
NATURAL GAS	G	.00000	.00000	.00000	.00000	
RESIDUAL OIL	G	.45852+02	.18563+04	.37196+08	.77004+03	NI V
STOKER F-T BOILER <29 MW						
ANTHRACITE	G	.13500+06	.10842+09	.57997+11	.26124+08	SOX PART POM HI BE CR CO
BIT/LIG COAL	G	.77069+05	.60991+08	.73591+12	.25052+08	SOX PART POM HI BE CR AL
HRT BOILERS <29 MW						
DISTILLATE OIL	G	.75353+03	.16533+05	.85256+08	.61187+04	POM HI
NATURAL GAS	G	.00000	.00000	.00000	.00000	
RESIDUAL OIL	G	.17281+04	.45400+05	.25166+09	.14830+05	SOX POM HI CR NI V
RES/COMM STEAM + HOT WAT						
ANTHRACITE	D	.00000	.00000	.00000	.00000	
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
BIT/LIG COAL	D	.00000	.00000	.00000	.00000	
RESIDUAL OIL	D	.00000	.00000	.00000	.00000	
WARM AIR FURNACES						
WARM AIR CENTRAL FURNACE						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
OIL	D	.00000	.00000	.00000	.00000	
WARM AIR SPACE HEATER						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
OIL	D	.00000	.00000	.00000	.00000	
MISCELLANEOUS COMBUSTION						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
GAS TURBINES						
SIMPLE CYCLE >15 MW						
DISTILLATE OIL	G	.43251+04	.93607+05	.29277+08	.49859+05	NOX SOX HC PART
NATURAL GAS	G	.24623+04	.50285+05	.14193+08	.36320+05	NOX SOX HC PART
SIMPLE CYCLE 3.7-15 MW						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
SIMPLE CYCLE <3.7 MW						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
RECIPROCATING I/C ENGINE						
C. I. >75KW/CYL						
DISTILLATE OIL	G	.39281+03	.82437+04	.10059+08	.19630+04	NOX SOX HC PART
DUAL (OIL + GAS)	G	.10948+04	.18867+05	.28697+08	.46492+04	NOX HC
S. I. >75KW/CYL						
NATURAL GAS	G	.15395+04	.27027+05	.10805+09	.53626+04	NOX HC
C. I. 75KW-75KW/CYL						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
S. I. 75KW-75KW/CYL						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
GASOLINE	D	.00000	.00000	.00000	.00000	

TABLE G-9. Concluded

SOURCE		1985 -- SUMMARY IMPACT FACTORS				POLLUTANTS EXCEEDING 10% MEG			
		SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE				
S. I. <75 KW GASOLINE	D	.00000	.00000	.00000	.00000				
IND. PROCESS COMBUSTION									
CEMENT KILNS PROCESSED MAT'L	G	.12266+04	.23669+05	.42807+08	.13571+05	SOX	PART		
GLASS MELTING FURNACES PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
GLASS ANNEALING LEHRS PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
COKE OVEN UNDERFIRE PROCESSED MAT'L	G	.96617+04	.86553+05	.44955+09	.21040+05	SOX	PART		
STEEL SINTERING MACHINES PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
OPEN HEARTH FURNCE (OIL) PROCESSED MAT'L	G	.26306+03	.49510+04	.25539+08	.23727+04	PART			
BRICK + CERAMIC KILNS PROCESSED MAT'L	G	.16372+04	.30311+05	.31764+09	.73720+04	PART			
CAT CRACKING (FCCU) PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
REFINERY FLARES PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
IRON + STEEL FLARES PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
REF. HTR.-NAT. DRAFT,GAS PROCESSED MAT'L	G	.27631+04	.51099+05	.33727+08	.22098+05	NOX	HC	PART	
REF. HTR.-NAT. DRAFT,OIL PROCESSED MAT'L	G	.70440+04	.14248+06	.21915+08	.61218+05	NOX	SOX	HC	PART
REF. HTR.-FOR. DRAFT,GAS PROCESSED MAT'L	G	.33094+04	.64253+05	.96852+07	.27687+05	NOX	HC	PART	
REF. HTR.-FOR. DRAFT,OIL PROCESSED MAT'L	G	.75594+04	.15486+06	.73106+07	.66480+05	NOX	SOX	HC	PART

*FIN

TABLE G-10. POLLUTION POTENTIAL OF THE SYNTHETICS ENERGY SCENARIO FOR 2000

SOURCE		2000 -- SUMMARY IMPACT FACTORS				POLLUTANTS EXCEEDING 10% MEG				
		SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE					
UTILITY BOILERS										
TANGENTIAL BOILERS										
EASTERN BITUMIN.	G	.38409+08	.86663+09	.55429+11	.37798+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CO	
CENTRAL BITUMIN.	G	.38202+08	.86270+09	.33309+11	.37625+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CO	
WESTERN BITUMIN.	G	.38086+08	.86086+09	.18229+11	.37541+09	NOX	SOX	PART	BE	CR
						CU	NI	AL	CO	
LIGNITE	G	.49406+08	.10373+10	.10242+10	.34576+09	NOX	SOX	PART	BA	BE
						CR	AL			
HIGH S RES. OIL	G	.12304+07	.25197+08	.15789+10	.17528+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
MED S RES. OIL	G	.11861+07	.24000+08	.37760+10	.16699+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
LOW S RES. OIL	G	.11313+07	.22533+08	.45852+10	.15685+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
DISTILLATE OIL	G	.33277+05	.89680+06	.65527+07	.39596+06	NOX	SOX			
NATURAL GAS	G	.23751+05	.59416+06	.16177+08	.25762+06	NOX	PART	POM HI		
WALL FIRED BOILER										
EASTERN BITUMIN.	G	.15966+08	.49634+09	.42714+11	.21292+09	NOX	SOX	PART	BE	CR
						AL				
CENTRAL BITUMIN.	G	.15986+08	.49694+09	.25835+11	.21318+09	NOX	SOX	PART	BE	CR
						AL				
WESTERN BITUMIN.	G	.15895+08	.49449+09	.14086+11	.21212+09	NOX	SOX	PART	BE	CR
						AL				
LIGNITE	G	.20641+08	.56933+09	.27022+09	.18525+09	NOX	SOX	PART	BA	BE
						CR	AL			
HIGH S RES. OIL	G	.16202+06	.43021+07	.12953+10	.29772+07	NOX	SOX	CR	NI	V
MED S RES. OIL	G	.15832+06	.41992+07	.31795+10	.29061+07	NOX	SOX	CR	NI	V
LOW S RES. OIL	G	.15361+06	.40677+07	.39803+10	.28152+07	NOX	SOX	CR	NI	V
DISTILLATE OIL	G	.15376+04	.42763+05	.70724+07	.18852+05	NOX	SOX			
NATURAL GAS	G	.11974+05	.30912+06	.53319+08	.13175+06	NOX				
OPPOSED WALL BOILER										
EASTERN BITUMIN.	G	.57923+08	.11864+10	.81458+10	.52060+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CO
CENTRAL BITUMIN.	G	.58037+08	.11882+10	.49185+10	.52141+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CO
WESTERN BITUMIN.	G	.57858+08	.11853+10	.26934+10	.52013+09	NOX	SOX	PART	BE	CR
						CU	PB	NI	AL	CO
LIGNITE	G	.75116+08	.14573+10	.38043+09	.48977+09	NOX	SOX	PART	BA	BE
						CR	CU	NI	AL	
HIGH S RES. OIL	G	.12870+07	.26076+08	.63660+09	.18144+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
MED S RES. OIL	G	.12420+07	.24869+08	.15300+10	.17308+08	NOX	SOX	PART	CR	CO
						CU	PB	NI	V	AL
						SE				
LOW S RES. OIL	G	.11914+07	.23540+08	.18781+10	.16389+08	NOX	SOX	PART	CR	CO

TABLE G-10. Continued

SOURCE		2000 -- SUMMARY IMPACT FACTORS SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% MEG
DISTILLATE OIL	G	.44062+05	.11737+07	.34548+07	.51852+06	CU SE NOX SOX
NATURAL GAS	G	.12796+06	.31788+07	.60981+08	.13788+07	NOX POM HI
CYCLONE BOILER						
CENTRAL BITUMIN.	G	.46269+08	.99702+09	.12270+11	.43608+09	NOX SOX PART BE CR CU PB NI AL CD
LIGNITE	G	.60198+08	.12158+10	.12134+10	.40676+09	NOX SOX PART BA BE CR AL
HIGH S RES. OIL	G	.38821+06	.70015+07	.17190+08	.48596+07	NOX SOX CR NI V
MED S RES. OIL	G	.26379+06	.58090+07	.34659+08	.40345+07	NOX SOX CR NI V
LOW S RES. OIL	G	.24801+06	.53752+07	.41518+08	.37345+07	NOX SOX CR NI V
VERTICAL + STOKER BOILER						
ANTHRACITE	G	.21423+07	.27206+09	.41226+10	.56126+08	BE CR
EASTERN BITUMIN.	G	.14265+07	.26032+09	.80250+10	.10757+09	SOX BE
CENTRAL BITUMIN.	G	.14306+07	.26044+09	.80288+10	.10762+09	SOX BE
LIGNITE	G	.18734+07	.26758+09	.46804+09	.81561+08	PART BE
PACKAGED BOILERS						
WALL FIRED W-TUBE >29 MW						
DISTILLATE OIL	G	.91235+03	.25816+05	.44984+07	.17598+05	NOX SOX
NATURAL GAS	G	.56233+03	.15453+05	.10421+08	.63698+04	NOX
PROCESS GAS	G	.56233+03	.15453+05	.14594+07	.63698+04	NOX
BIT/LIG COAL	G	.34273+07	.29246+09	.20561+12	.14794+09	NOX SOX PART BE CR AL
RESIDUAL OIL	G	.66256+05	.24858+07	.19862+10	.10341+07	NOX SOX CR NI V
STOKER W-TUBE >29 MW						
BIT/LIG COAL	G	.22803+07	.27273+09	.20198+12	.10229+09	NOX SOX PART BE CR AL
SINGLE BURNER W-T <29 MW						
DISTILLATE OIL	G	.17483+02	.53144+03	.52986+06	.19223+03	SOX
NATURAL GAS	G	.32853+02	.90683+03	.20381+07	.12025+03	NOX
PROCESS GAS	G	.59688+02	.16256+04	.21762+06	.21628+03	NOX
RESIDUAL OIL	G	.42663+04	.14216+06	.64751+09	.45634+05	NOX SOX CR NI V
SCOTCH FIRETUBE <29 MW						
DISTILLATE OIL	G	.94585+03	.20756+05	.29404+09	.76813+04	POM HI
NATURAL GAS	G	.50223+04	.10859+06	.48371+09	.15379+05	POM HI
PROCESS GAS	G	.96079+04	.20692+06	.11266+08	.29339+05	POM HI
RESIDUAL OIL	G	.21697+04	.56839+05	.13076+10	.18567+05	SOX POM HI CR NI V
FIREBOX FIRETUBE <29 MW						
DISTILLATE OIL	G	.84381+03	.18512+05	.25449+09	.68510+04	POM HI
NATURAL GAS	G	.00000	.00000	.00000	.00000	
PROCESS GAS	G	.00000	.00000	.00000	.00000	
RESIDUAL OIL	G	.19351+04	.50833+05	.80707+09	.16604+05	SOX POM HI CR NI V
STOKER FIRED W-TUBE <29 MW						
ANTHRACITE	G	.14481+07	.26081+09	.14799+11	.63694+08	NOX SOX PART BE CR CO CU NI
BIT/LIG COAL	G	.98579+06	.25330+09	.17714+13	.10443+09	NOX SOX PART BE CR CU NI AL CD
CAST IRON BOILERS						
DISTILLATE OIL	G	.00000	.00000	.00000	.00000	
NATURAL GAS	G	.00000	.00000	.00000	.00000	

TABLE G-10. Continued

2000 -- SUMMARY

SOURCE		IMPACT FACTORS				POLLUTANTS EXCEEDING 10E6 MEG
		SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	
RESIDUAL OIL	G	.51345+02	.20785+04	.72455+08	.86219+03	NI V
STOKER F-T BOILER <29 MW						
ANTHRACITE	G	.15117+06	.12140+09	.10841+12	.29251+08	SOX PART POM HI BE CR CO
BIT/LIG COAL	G	.86302+05	.68289+08	.13754+13	.28050+08	SOX PART POM HI BE CR AL
HRT BOILERS <29 MW						
DISTILLATE OIL	G	.84381+03	.18512+05	.16608+09	.68510+04	POM HI
NATURAL GAS	G	.00000	.00000	.00000	.00000	
RESIDUAL OIL	G	.19351+04	.50833+05	.49025+09	.16604+05	SOX POM HI CR NI V
RES/COMM STEAM + HOT WAT						
ANTHRACITE	D	.00000	.00000	.00000	.00000	
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
BIT/LIG COAL	D	.00000	.00000	.00000	.00000	
RESIDUAL OIL	D	.00000	.00000	.00000	.00000	
WARM AIR FURNACES						
WARM AIR CENTRAL FURNACE						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
OIL	D	.00000	.00000	.00000	.00000	
WARM AIR SPACE HEATER						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
OIL	D	.00000	.00000	.00000	.00000	
MISCELLANEOUS COMBUSTION						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
GAS TURBINES						
SIMPLE CYCLE >15 MW						
DISTILLATE OIL	G	.33094+04	.68409+05	.32838+08	.36510+05	NOX SOX HC PART
NATURAL GAS	G	.21145+04	.41075+05	.21461+08	.29698+05	NOX SOX HC PART
SIMPLE CYCLE 3.7-15 MW						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
SIMPLE CYCLE <3.7 MW						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
NATURAL GAS	D	.00000	.00000	.00000	.00000	
RECIPROCATING I/C ENGINE						
C. I. >75KW/CYL						
DISTILLATE OIL	G	.38594+03	.79548+04	.16483+08	.18997+04	NOX SOX HC PART
DUAL (OIL + GAS)	G	.11997+04	.20496+05	.50374+08	.50589+04	NOX HC
S. I. >75KW/CYL						
NATURAL GAS	G	.17239+04	.30262+05	.45455+08	.60045+04	NOX HC
C. I. 75KW-75KW/CYL						
DISTILLATE OIL	D	.00000	.00000	.00000	.00000	
S. I. 75KW-75KW/CYL						
NATURAL GAS	D	.00000	.00000	.00000	.00000	
GASOLINE	D	.00000	.00000	.00000	.00000	
S. I. <75 KW						
GASOLINE	D	.00000	.00000	.00000	.00000	

TABLE G-10. Concluded

SOURCE		2000 -- SUMMARY IMPACT FACTORS SINGLE RURAL	SINGLE URBAN	TOTAL	SINGLE SOURCE	POLLUTANTS EXCEEDING 10% MEG			
IND. PROCESS COMBUSTION									
CEMENT KILNS									
PROCESSED MAT'L	G	.13758+04	.26502+05	.75572+08	.15195+05	SOX	PART		
GLASS MELTING FURNACES									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
GLASS ANNEALING LEHRS									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
COKE OVEN UNDERFIRE									
PROCESSED MAT'L	G	.52202+04	.96910+05	.79455+09	.23558+05	SOX	PART		
STEEL SINTERING MACHINES									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
OPEN HEARTH FURNCE (OIL)									
PROCESSED MAT'L	G	.29458+03	.55435+04	.45123+08	.26566+04	PART			
BRICK + CERAMIC KILNS									
PROCESSED MAT'L	G	.18334+04	.33939+05	.56114+09	.82544+04	PART			
CAT CRACKING (FCCU)									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
REFINERY FLARES									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
IRON + STEEL FLARES									
PROCESSED MAT'L	G	.00000	.00000	.00000	.00000				
REF. HTR.-NAT. DRAFT.GAS									
PROCESSED MAT'L	G	.29248+04	.53197+05	.55485+08	.23034+05	NOX	HC	PART	
REF. HTR.-NAT. DRAFT.OIL									
PROCESSED MAT'L	G	.73275+04	.14609+06	.34666+08	.62831+05	NOX	SOX	HC	PART
REF. HTR.-FOR. DRAFT.GAS									
PROCESSED MAT'L	G	.33542+04	.63492+05	.75613+07	.27409+05	NOX	HC	PART	
REF. HTR.-FOR. DRAFT.OIL									
PROCESSED MAT'L	G	.78403+04	.15876+06	.11833+08	.68208+05	NOX	SOX	HC	PART

*FIN

APPENDIX H

POLLUTION POTENTIAL TRENDS TO THE YEAR 2000 FOR THE ENERGY PROJECTION SCENARIOS

Appendix H gives the pollution potential trends of the energy projection scenarios described in Section 3.4.1. These graphs are displayed as follows:

- Reference high nuclear scenario: H-1 to H-5
- Reference low nuclear scenario: H-6 to H-10
- Conservation scenario: H-11 to H-15
- Electrification scenario: H-16 to H-20
- Synthetics scenario: H-21 to H-25

The pollution potential values for these scenarios were obtained using the Source Analysis Model (SAM) described in Section 5.1. The plots show the total national pollution impact factors for each equipment type. For example, the impact value for coal-fired utility boilers results from the summation of total impact factors for all coal-fired equipment types within the utility boiler sector.

The plots displayed here show that coal fired sources have the highest total source impact through the year 2000 due to the increasing dependence on coal as an energy source. Natural gas-fired sources become less important due to decreased use of natural gas as an energy resource. For further perusal, Sections 5.3 and 5.4 discuss the results and conclusions of the trends assessment through the year 2000.

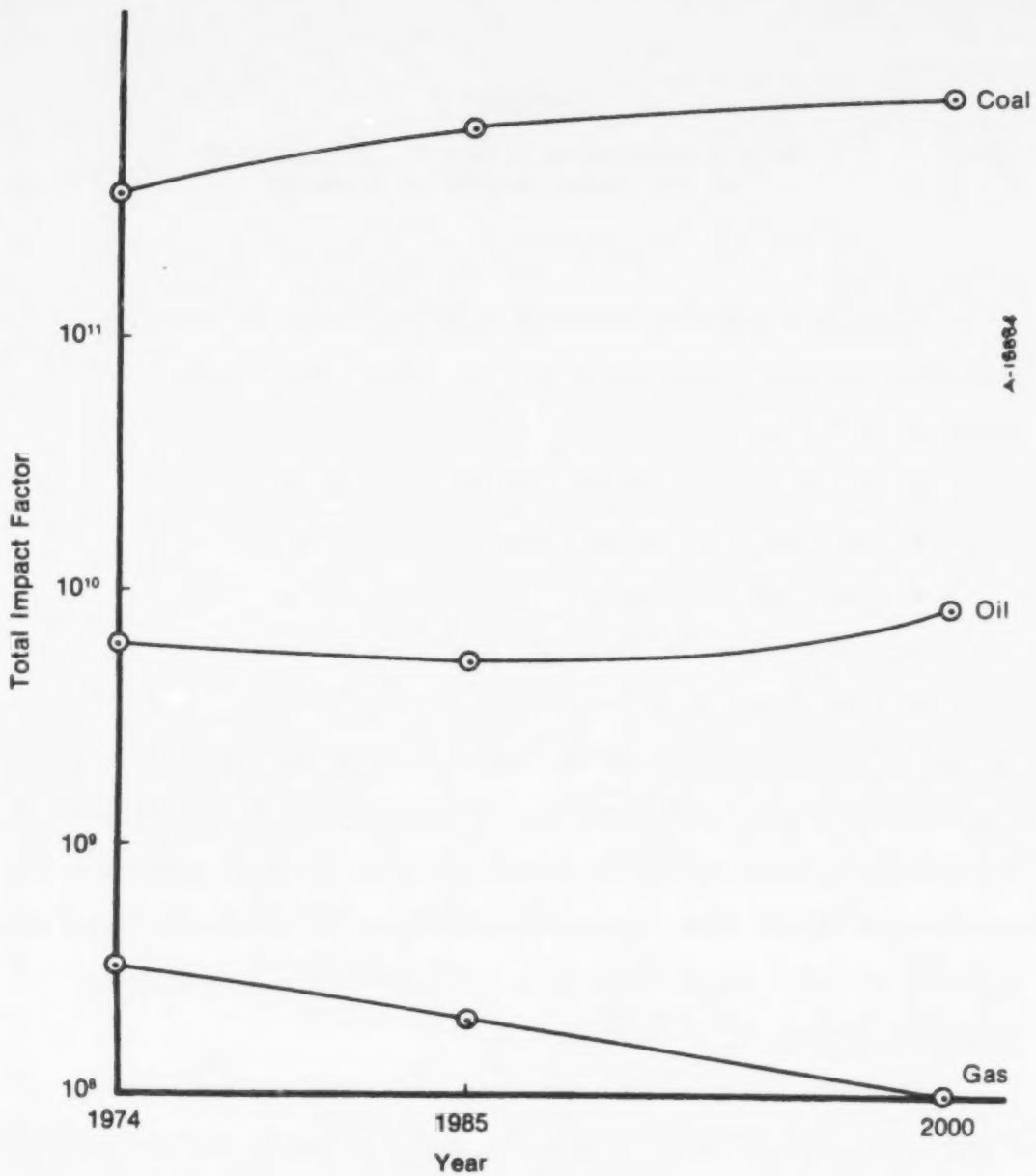


Figure H-1. Reference high nuclear scenario trends in pollution potential for utility and large industrial boilers.

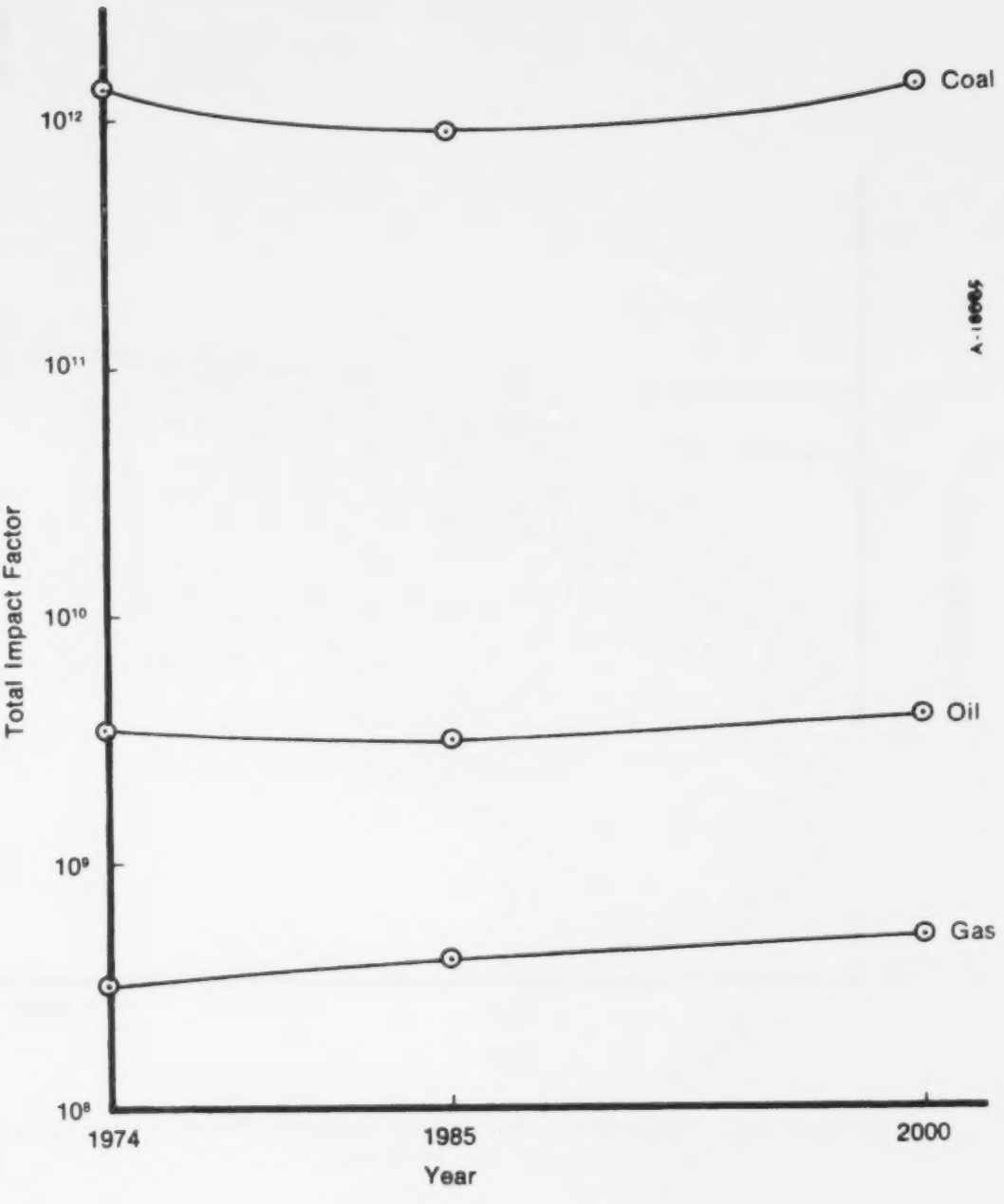


Figure H-2. Reference high nuclear scenario trends in pollution potential for packaged boilers.

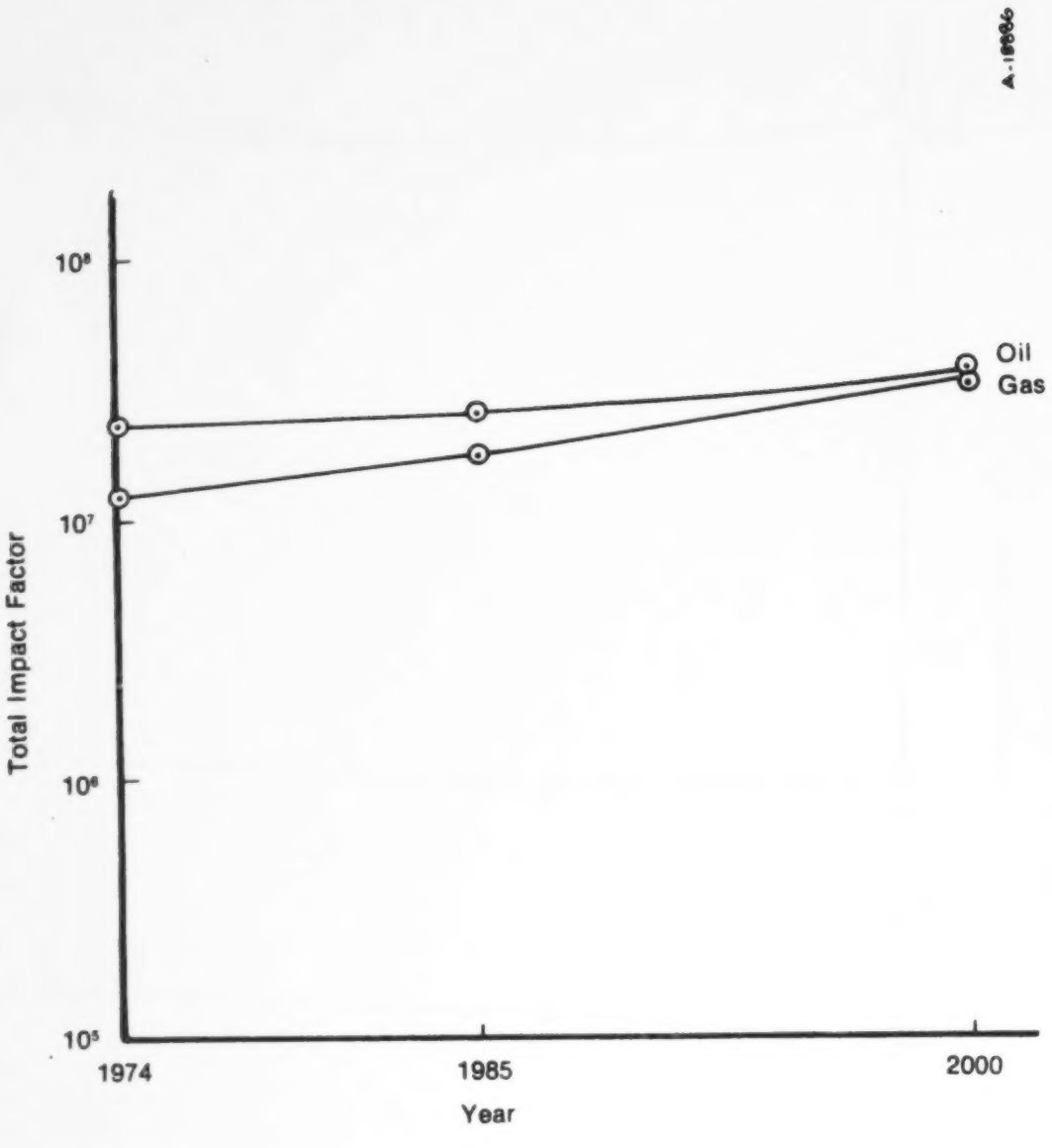


Figure H-3. Reference high nuclear scenario trends in pollution potential for gas turbines.

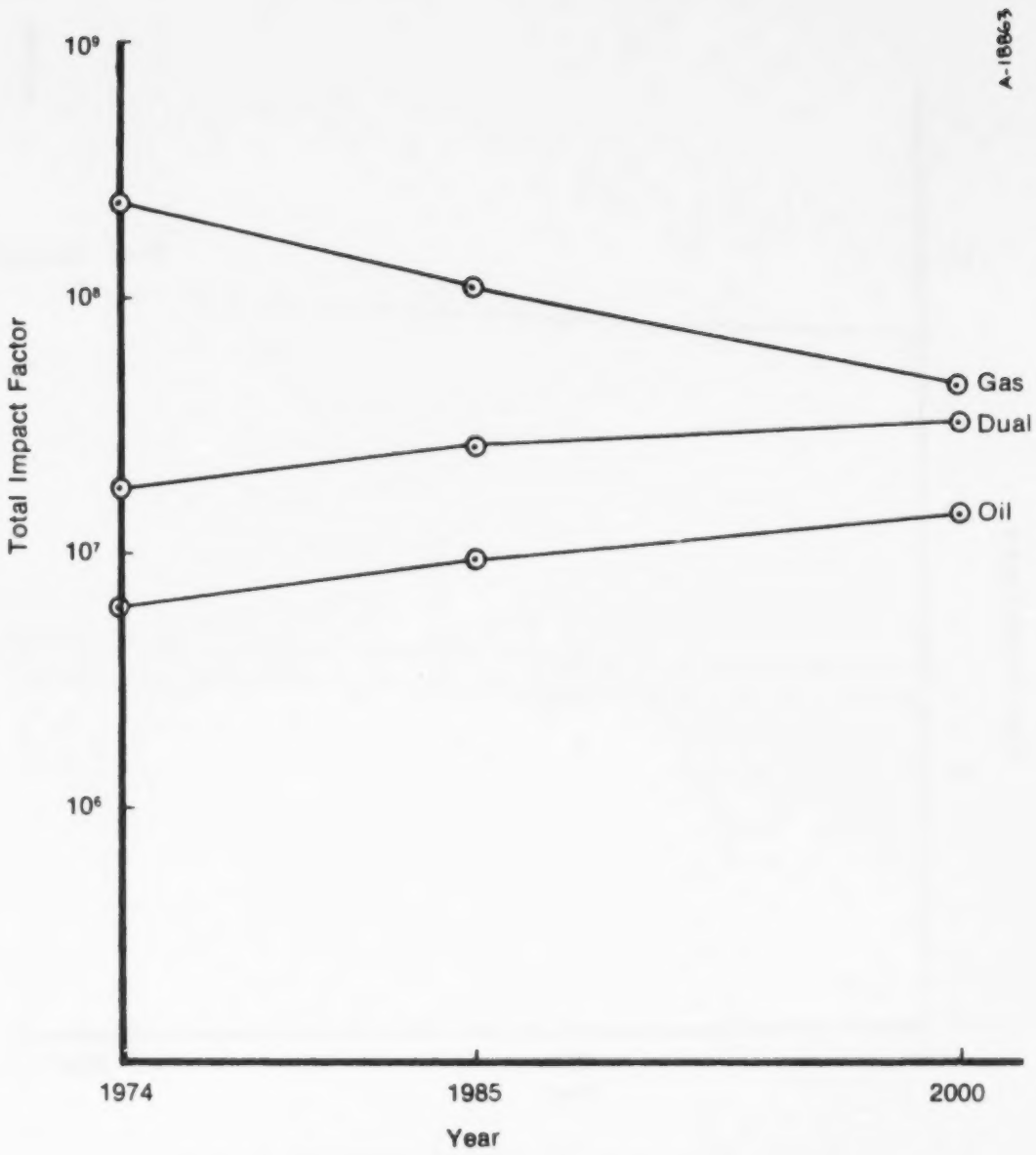
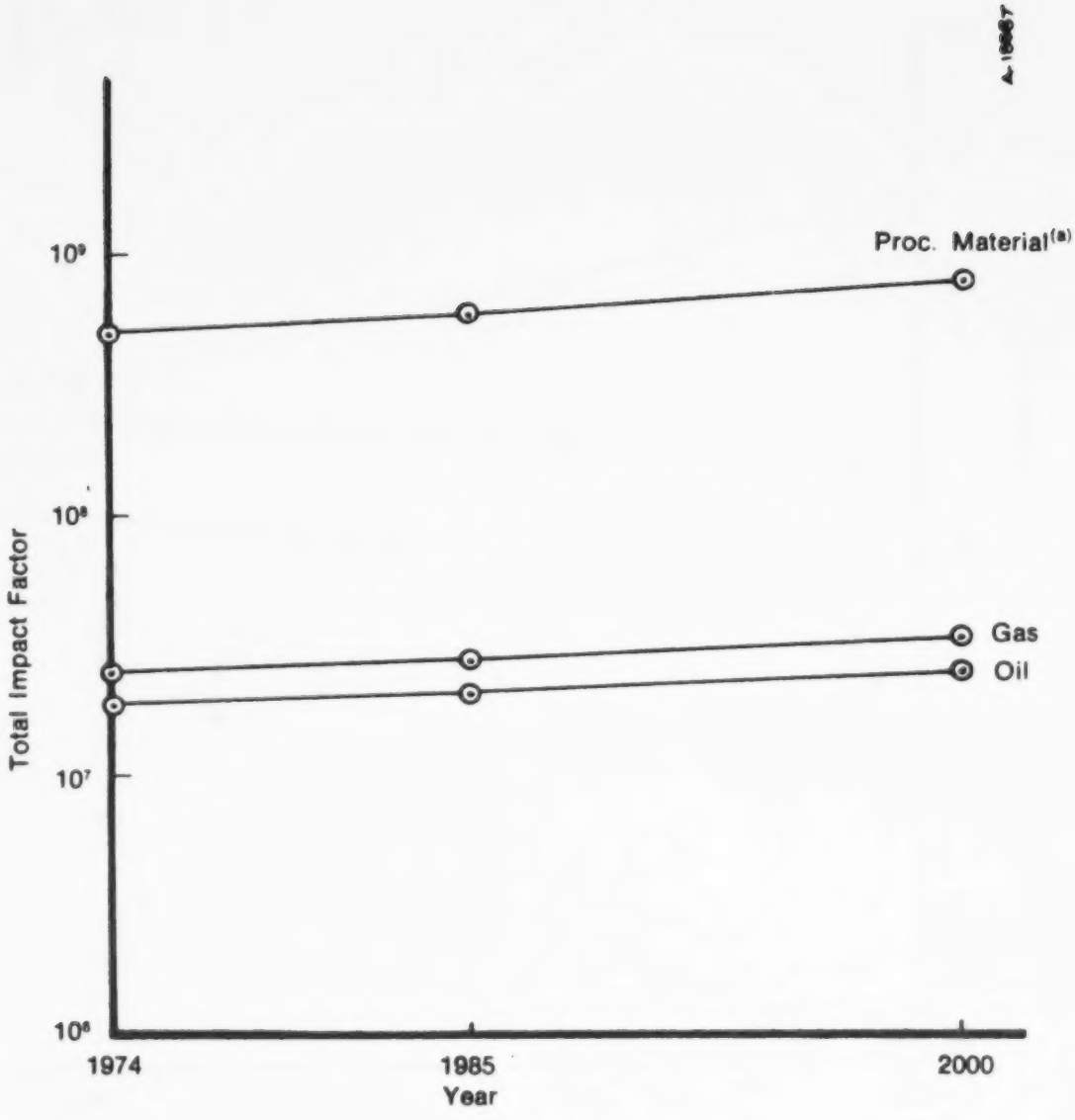


Figure H-4. Reference high nuclear scenario trends in pollution potential for reciprocating IC engines.



(a) Emission factors given as a function of processed material

Figure H-5. Reference high nuclear scenario trends in pollution potential for industrial process combustion.

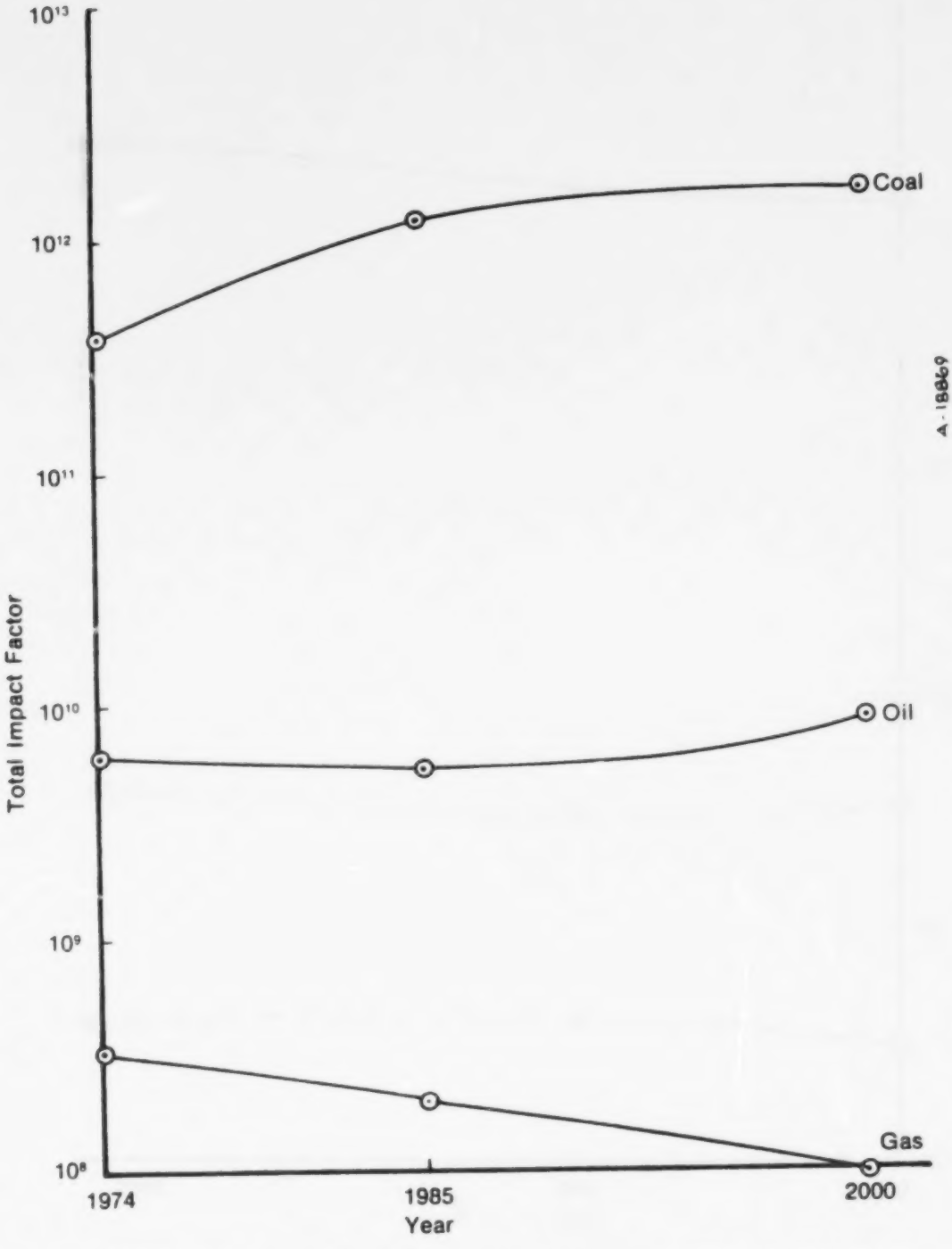


Figure H-6. Reference low nuclear scenario trends in pollution potential for utility and large industrial boilers.

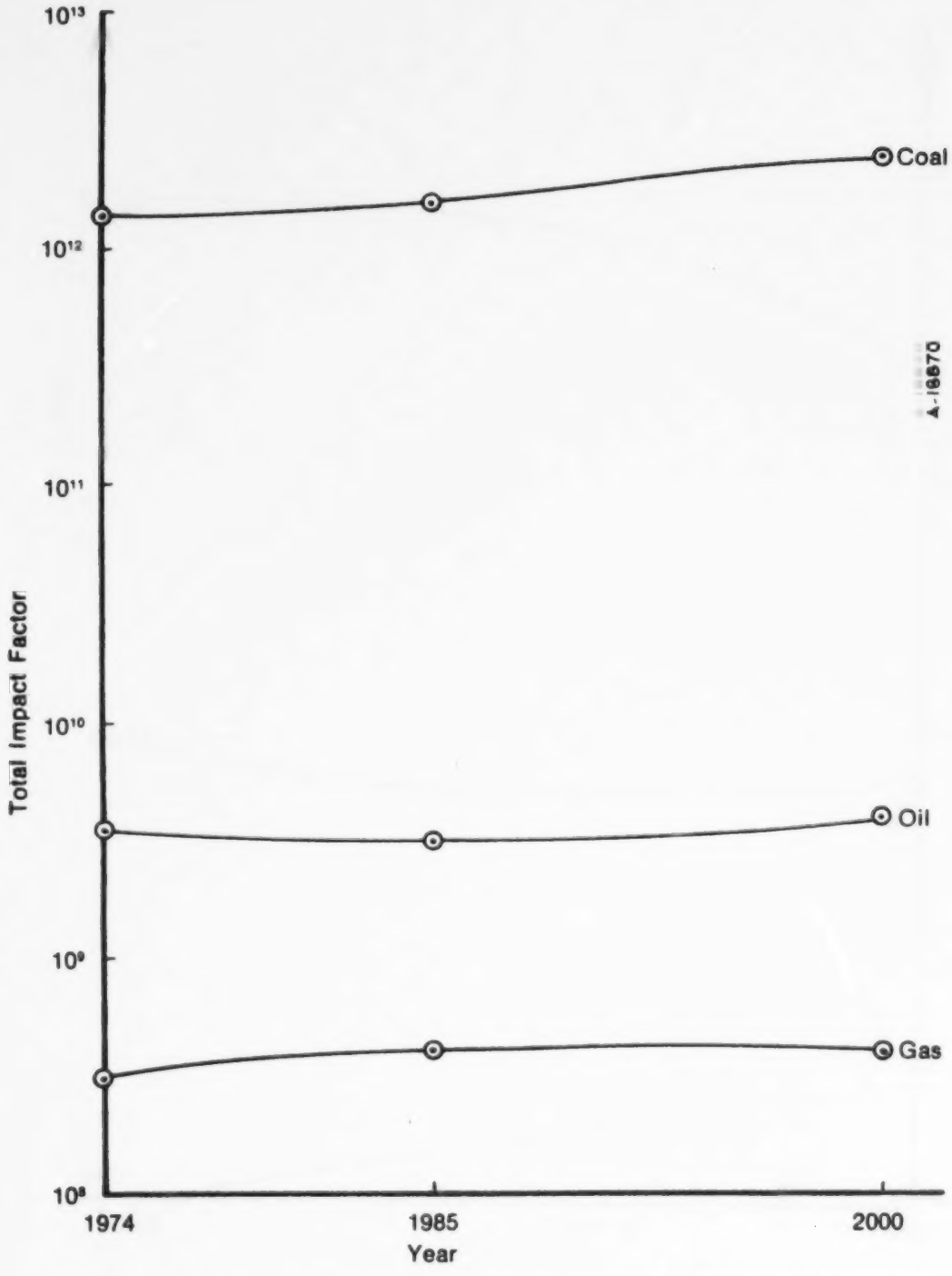


Figure H-7. Reference low nuclear scenario trends in pollution potential for packaged boilers.

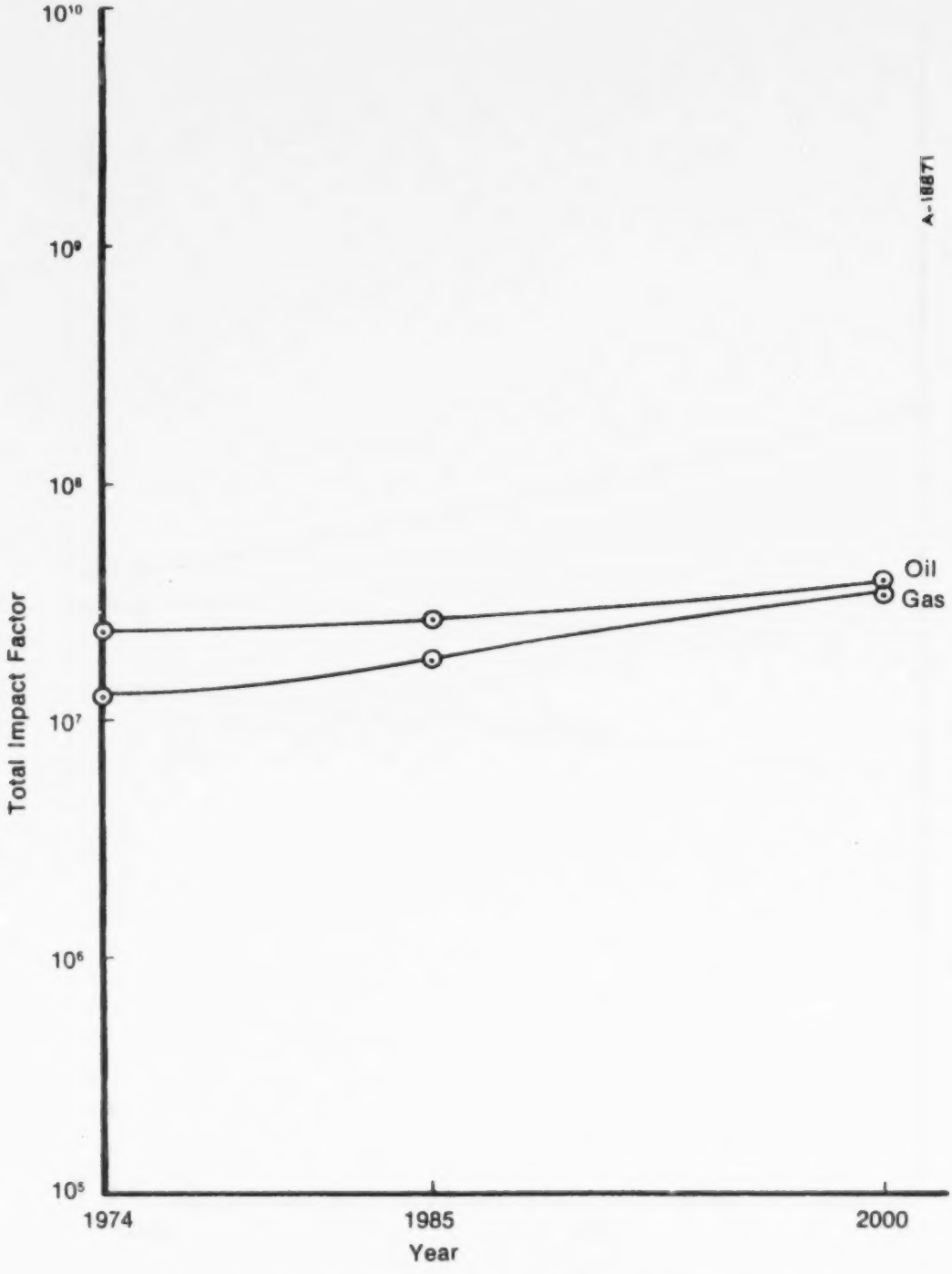


Figure H-8. Reference low nuclear scenario trends in pollution potential for gas turbines.

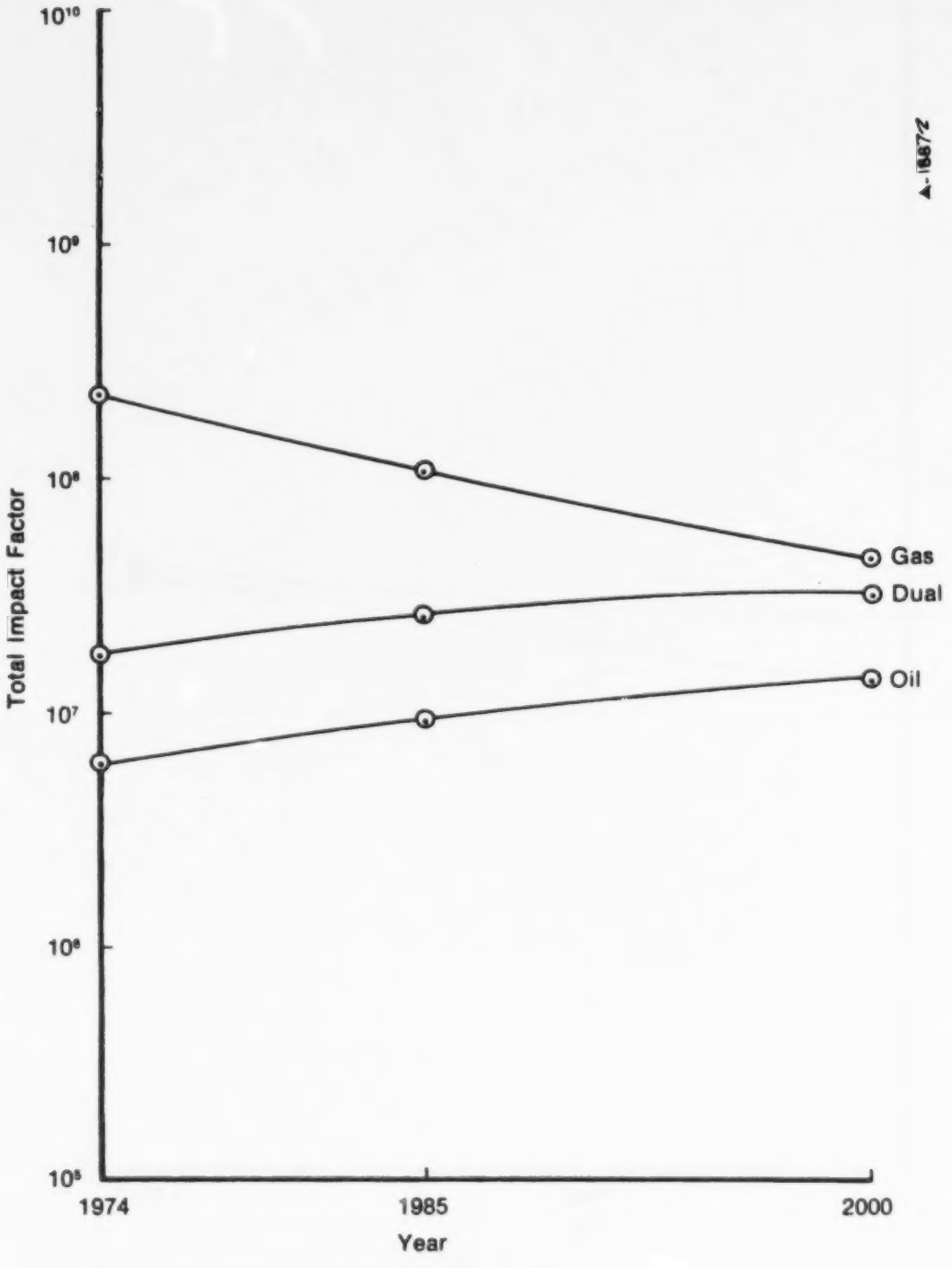
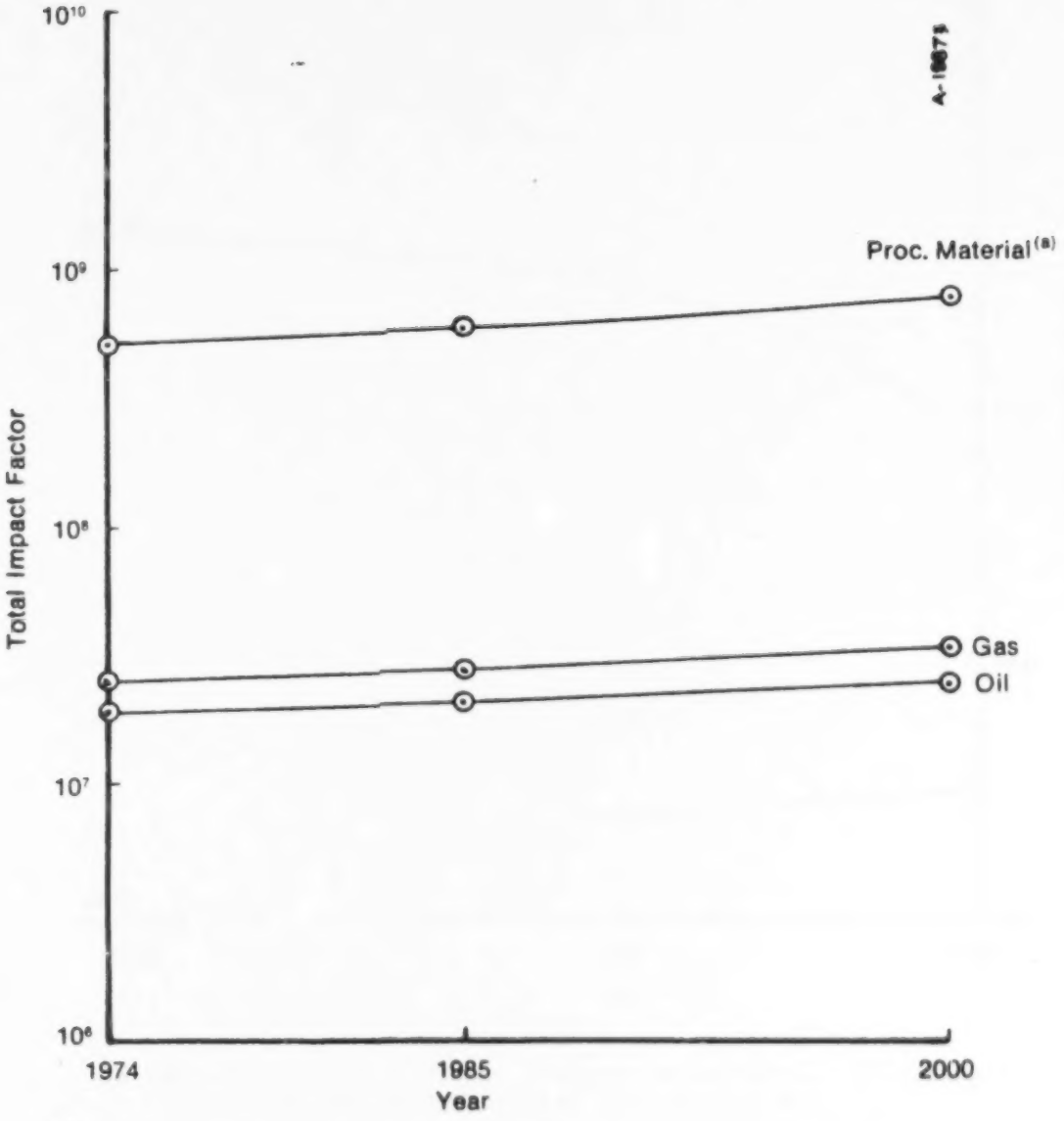


Figure H-9. Reference low nuclear scenario trends in pollution potential for reciprocating IC engines.



(a)Emission factors given as a function of processed material

Figure H-10. Reference low nuclear scenario trends in pollution potential for industrial process heating.

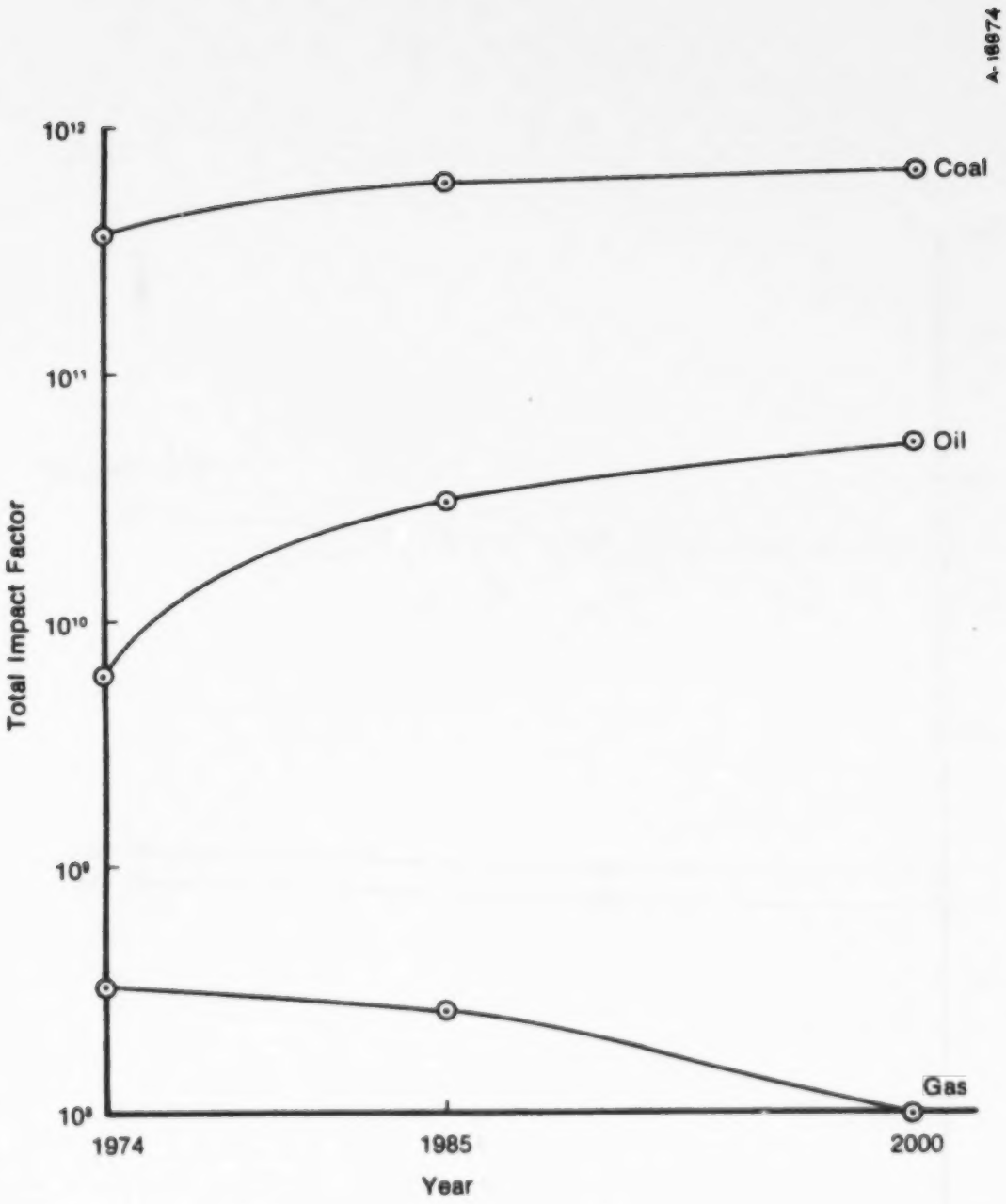


Figure H-11. Conservation scenario trends in pollution potential for utility and large industrial boilers.

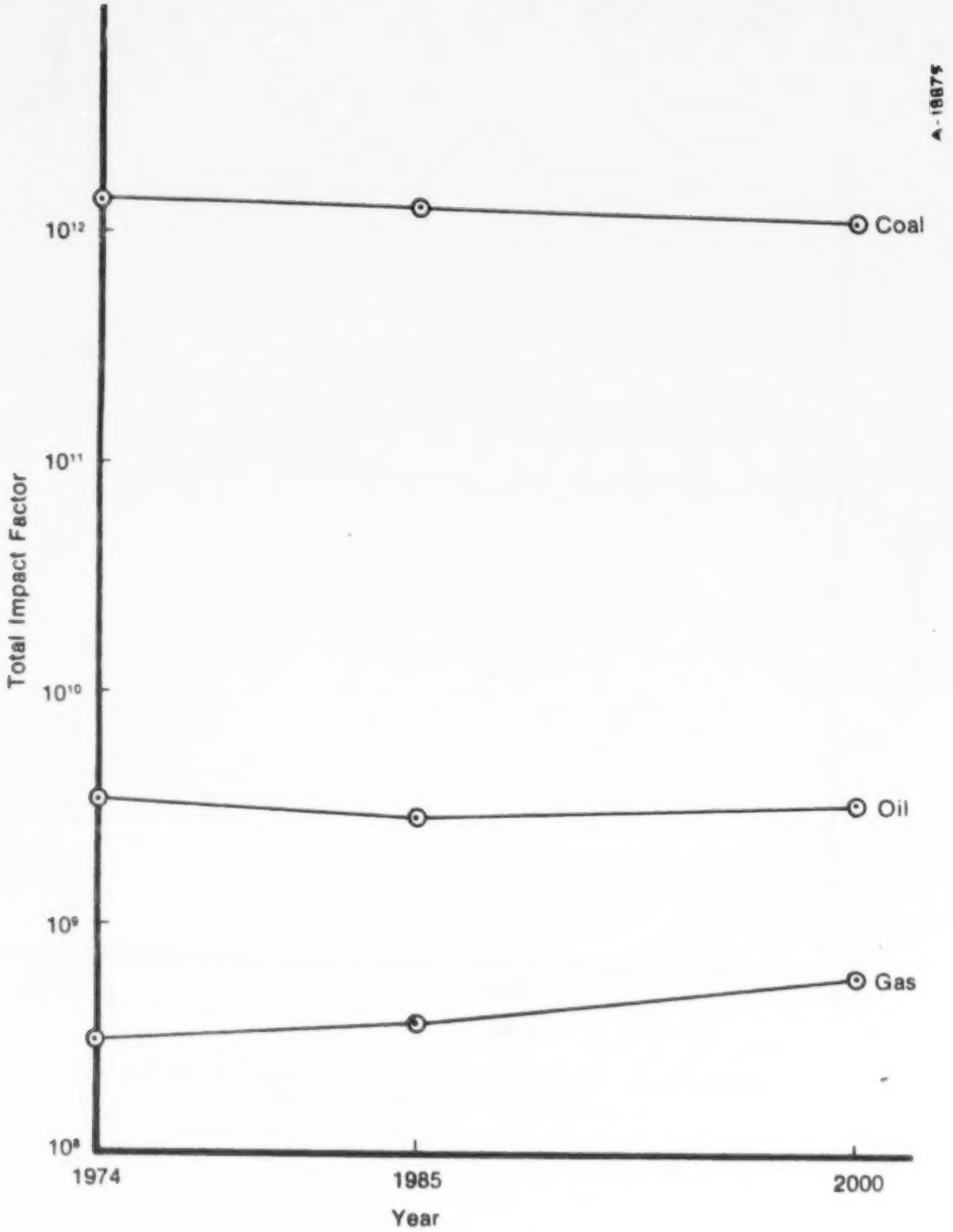


Figure H-12. Conservation scenario trends in pollution potential for packaged boilers.

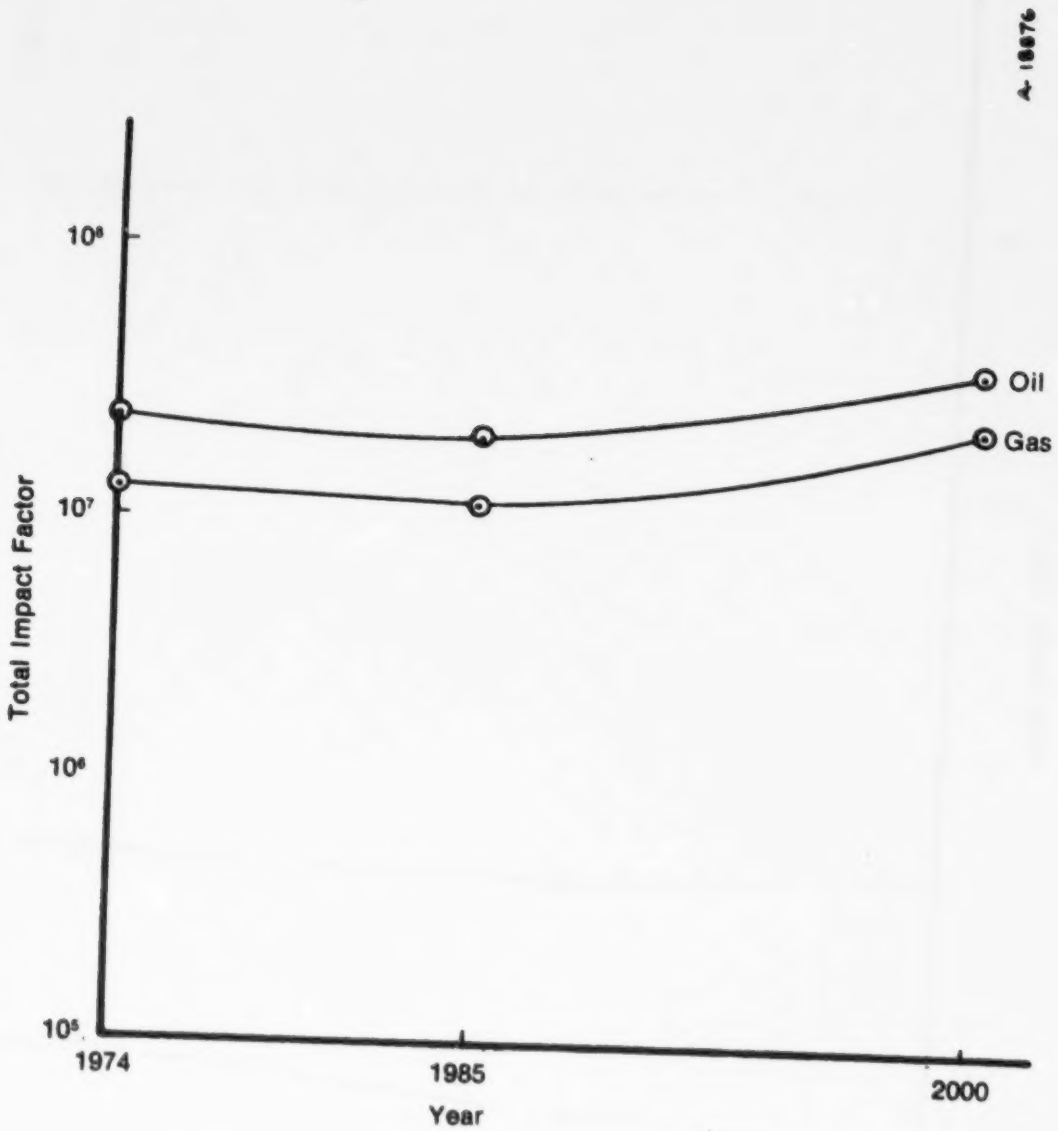


Figure H-13. Conservation scenario trends in pollution potential for gas turbines.

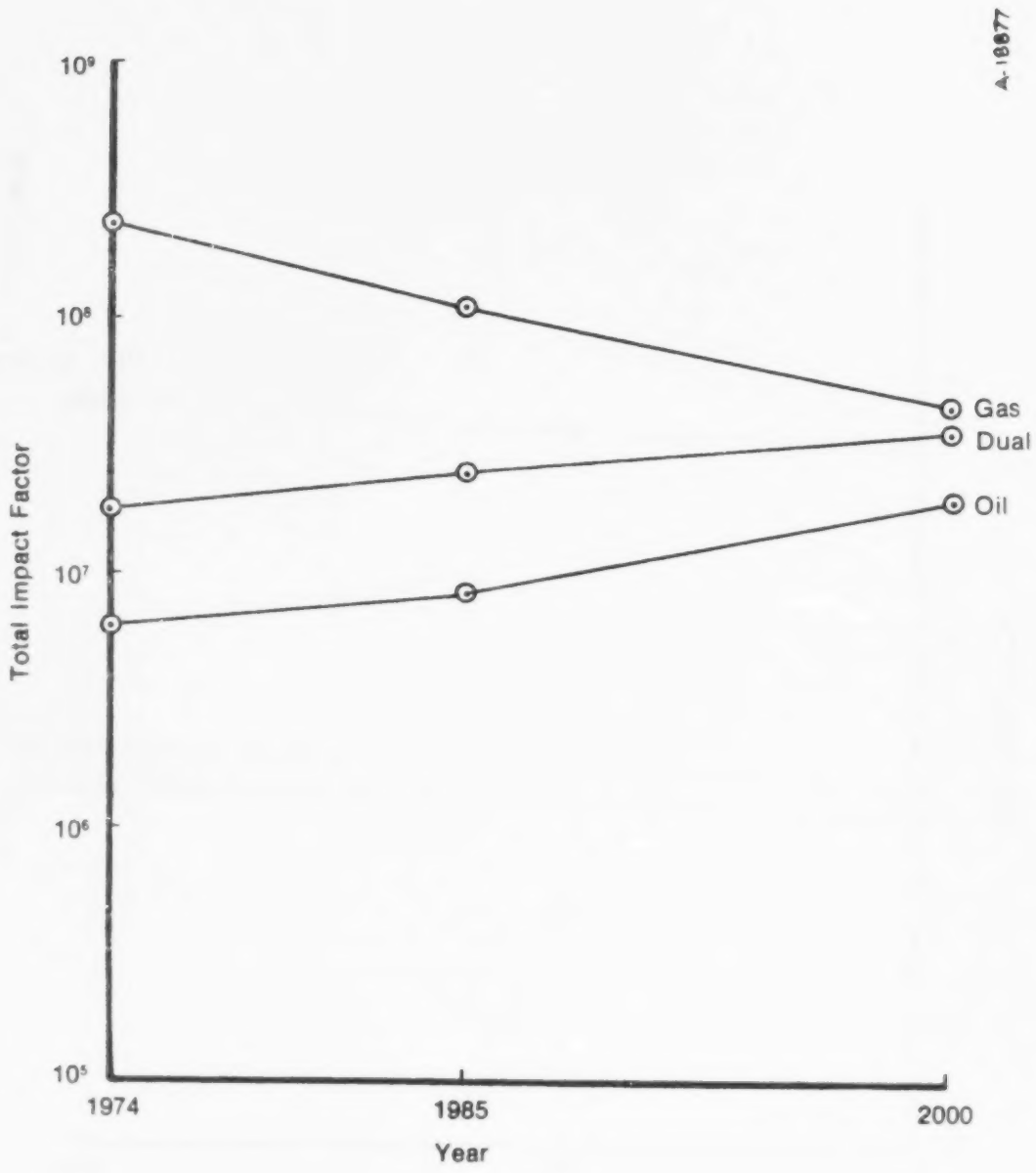
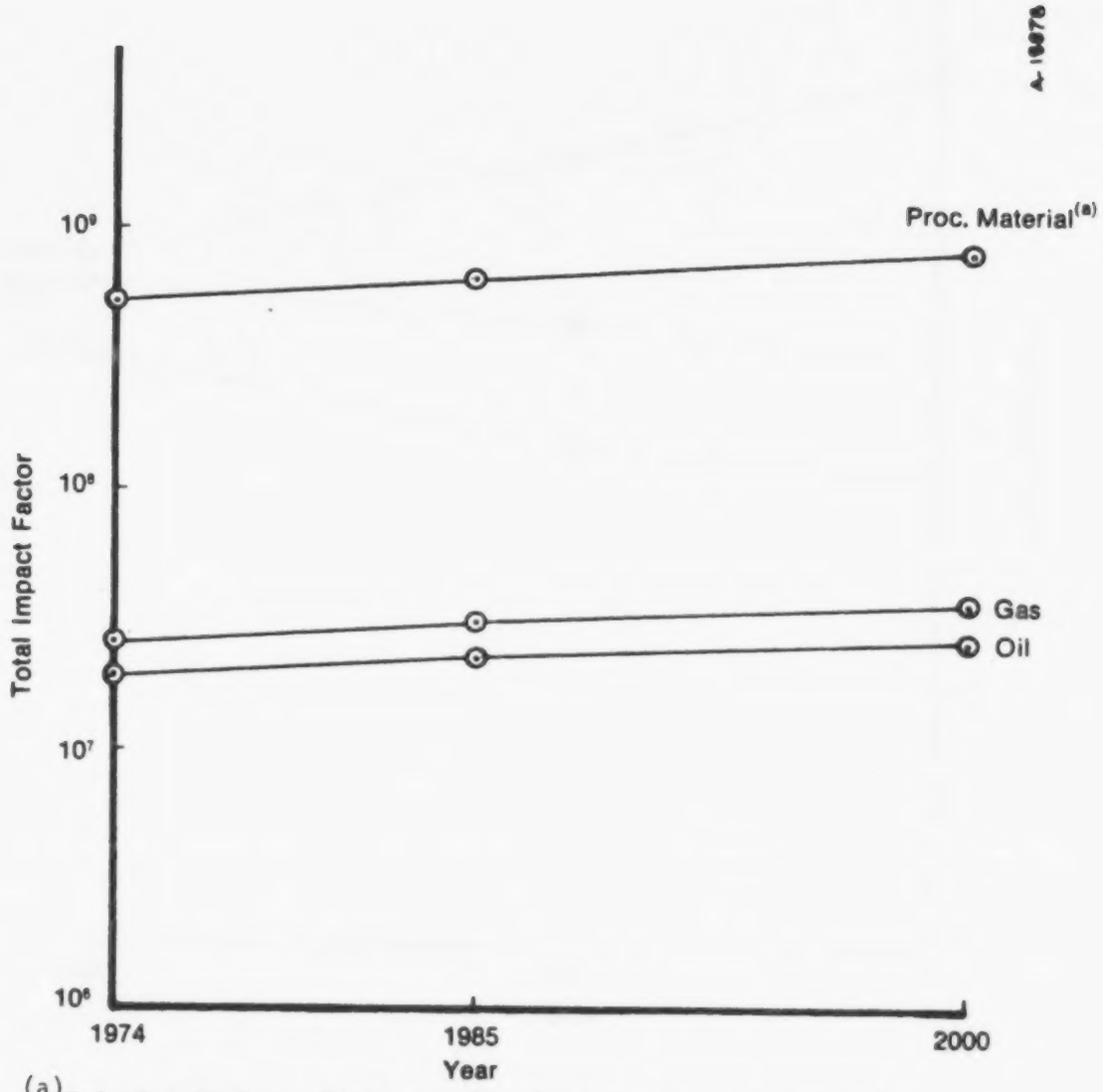


Figure H-14. Conservation scenario trends in pollution potential for reciprocating IC engines.



(a) Emission factors given as a function of processed material

Figure H-15. Conservation scenario trends in pollution potential for industrial process combustion.

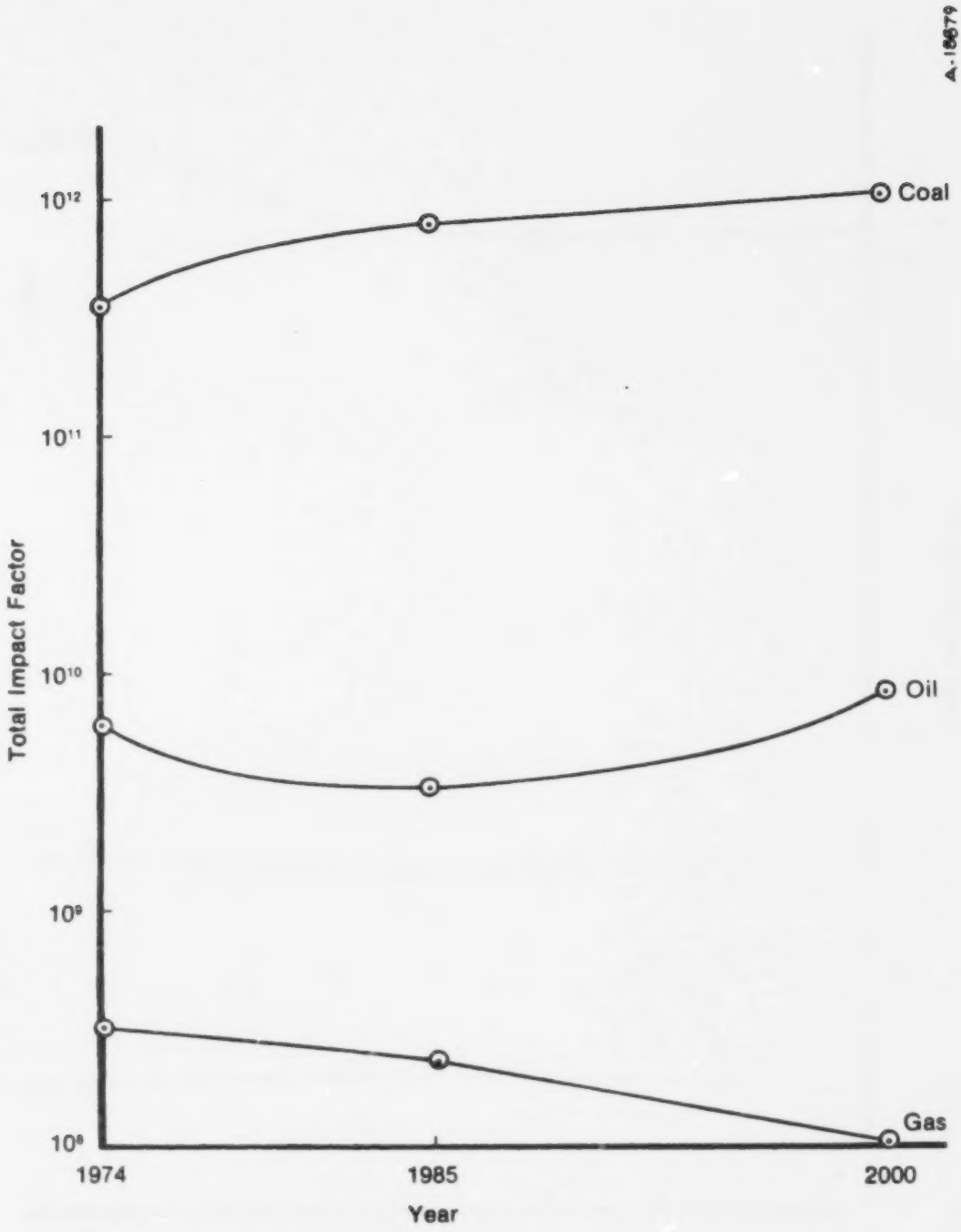


Figure H-16. Electrification scenario trends in pollution potential for utility and large industrial boilers.

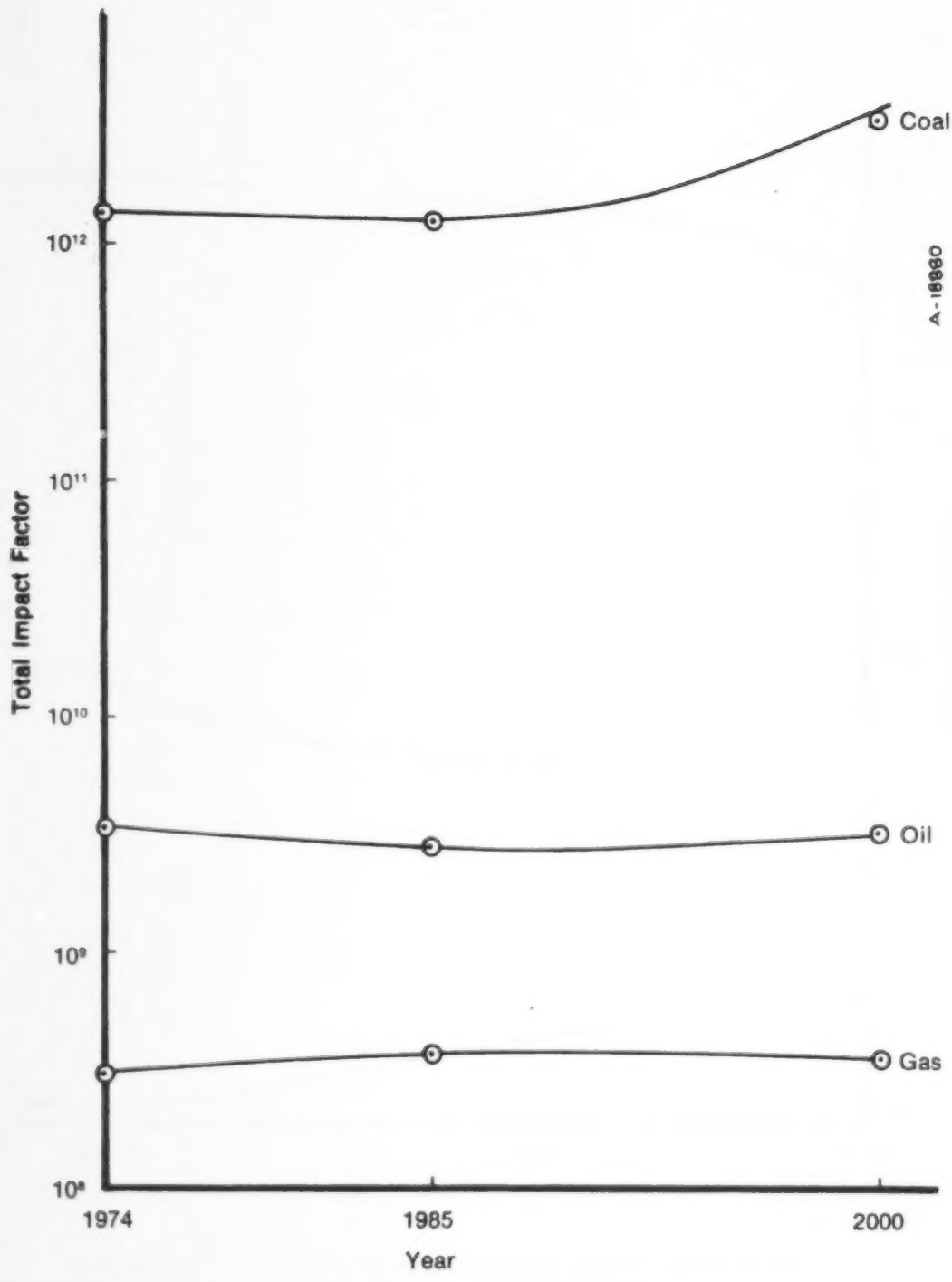


Figure H-17. Electrification scenario trends in pollution potential for packaged boilers.

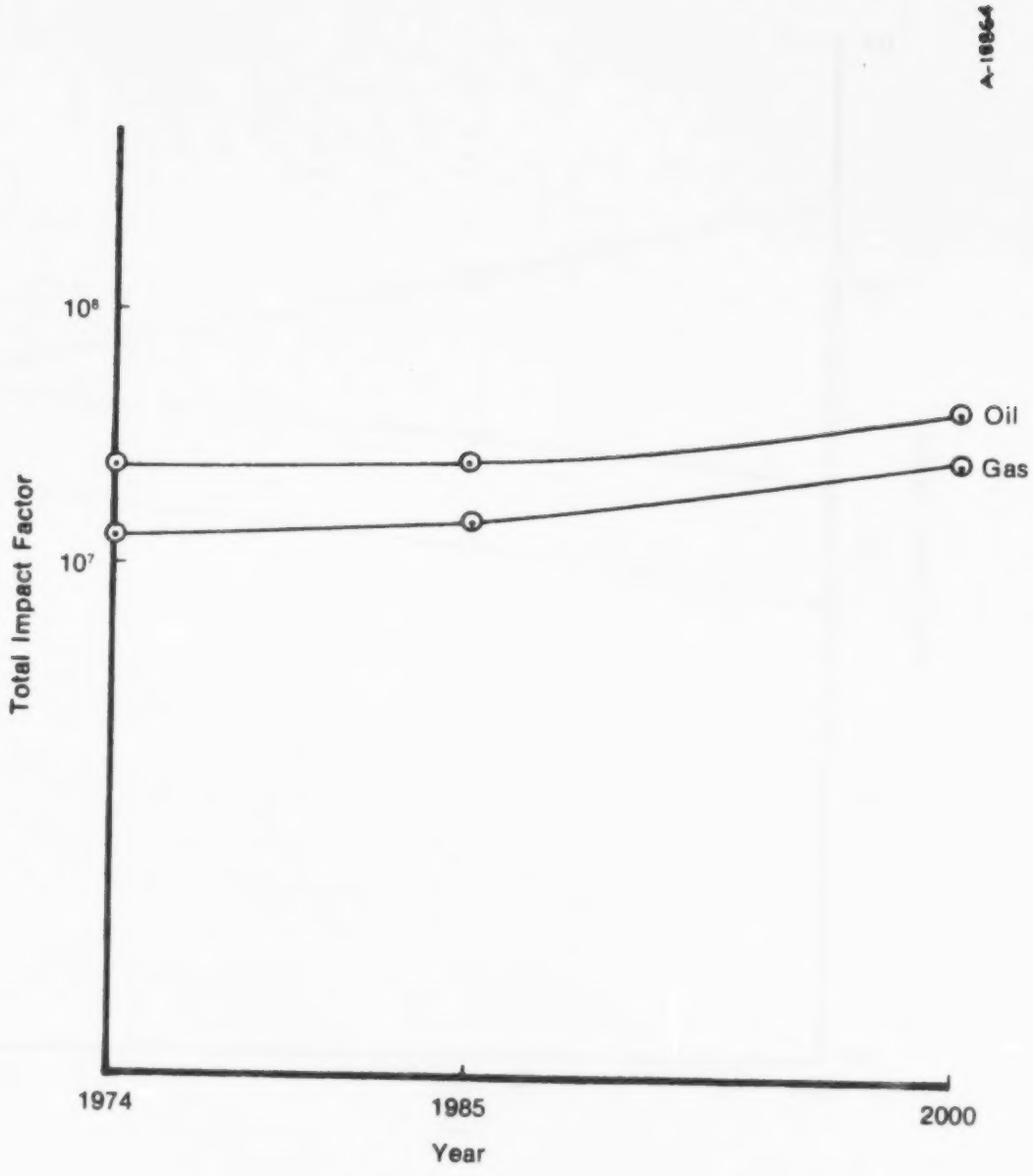


Figure H-18. Electrification scenario trends in pollution potential for gas turbines.

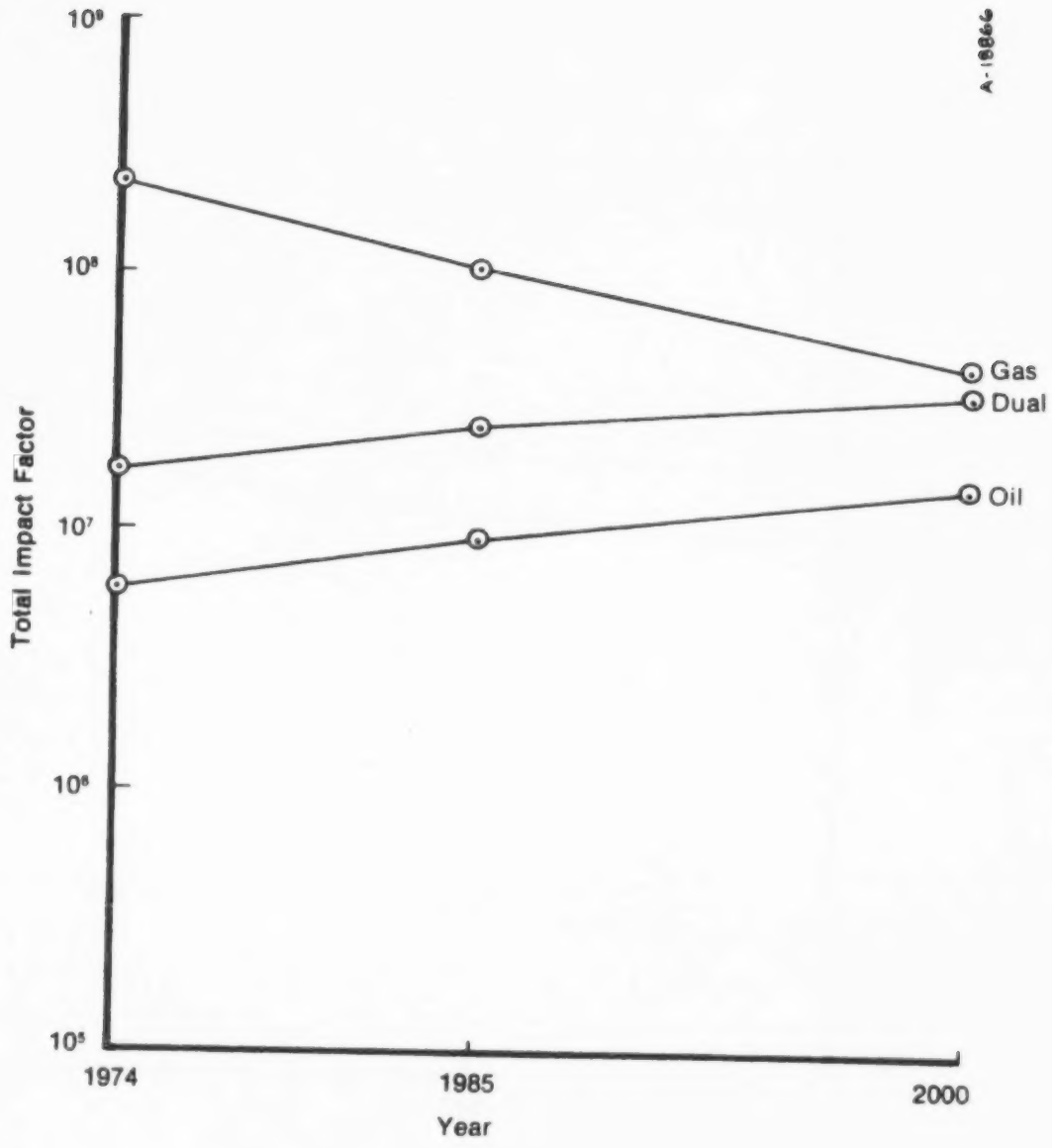


Figure H-19. Electrification scenario trends in pollution potential for reciprocating IC engines.

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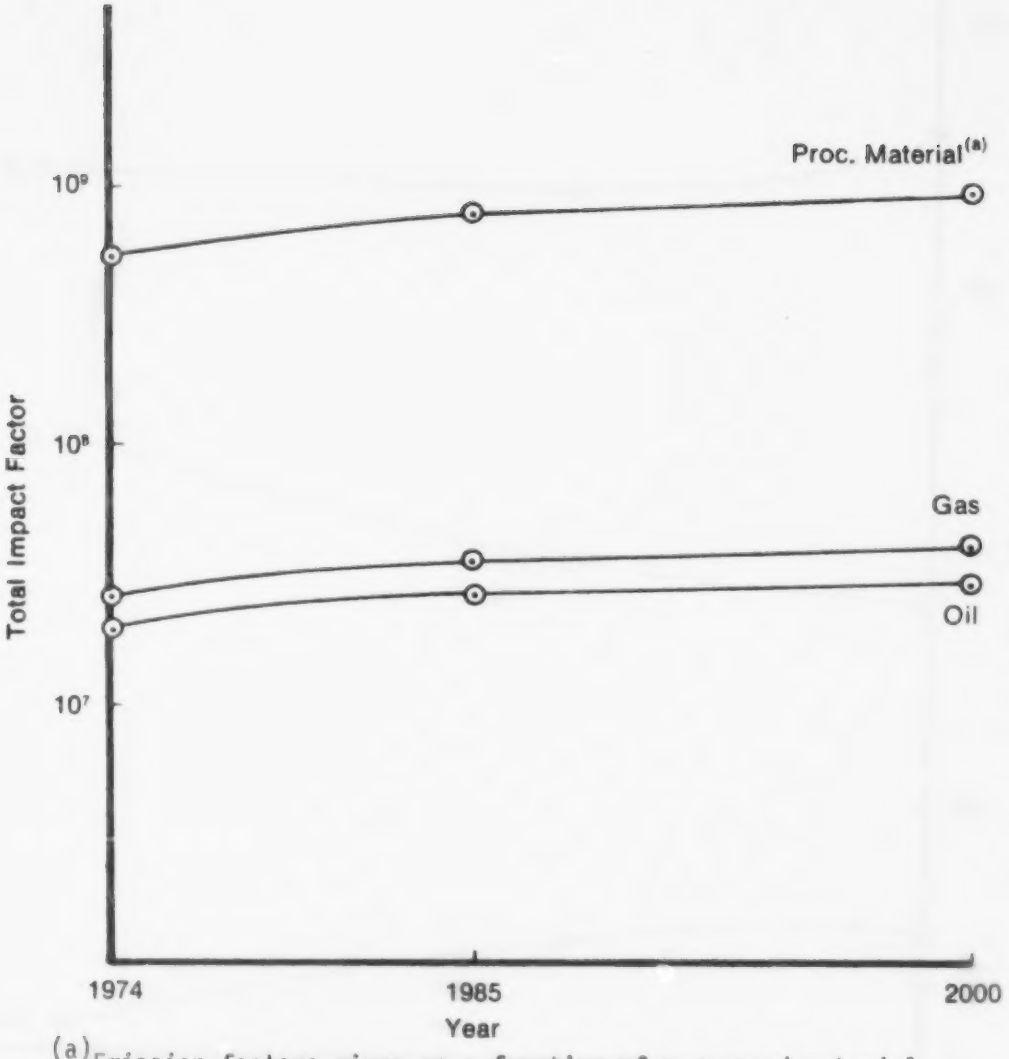


(a) Emission factors given as a function of processed material

Figure H-20. Electrification scenario trends in pollution potential for industrial process combustion.

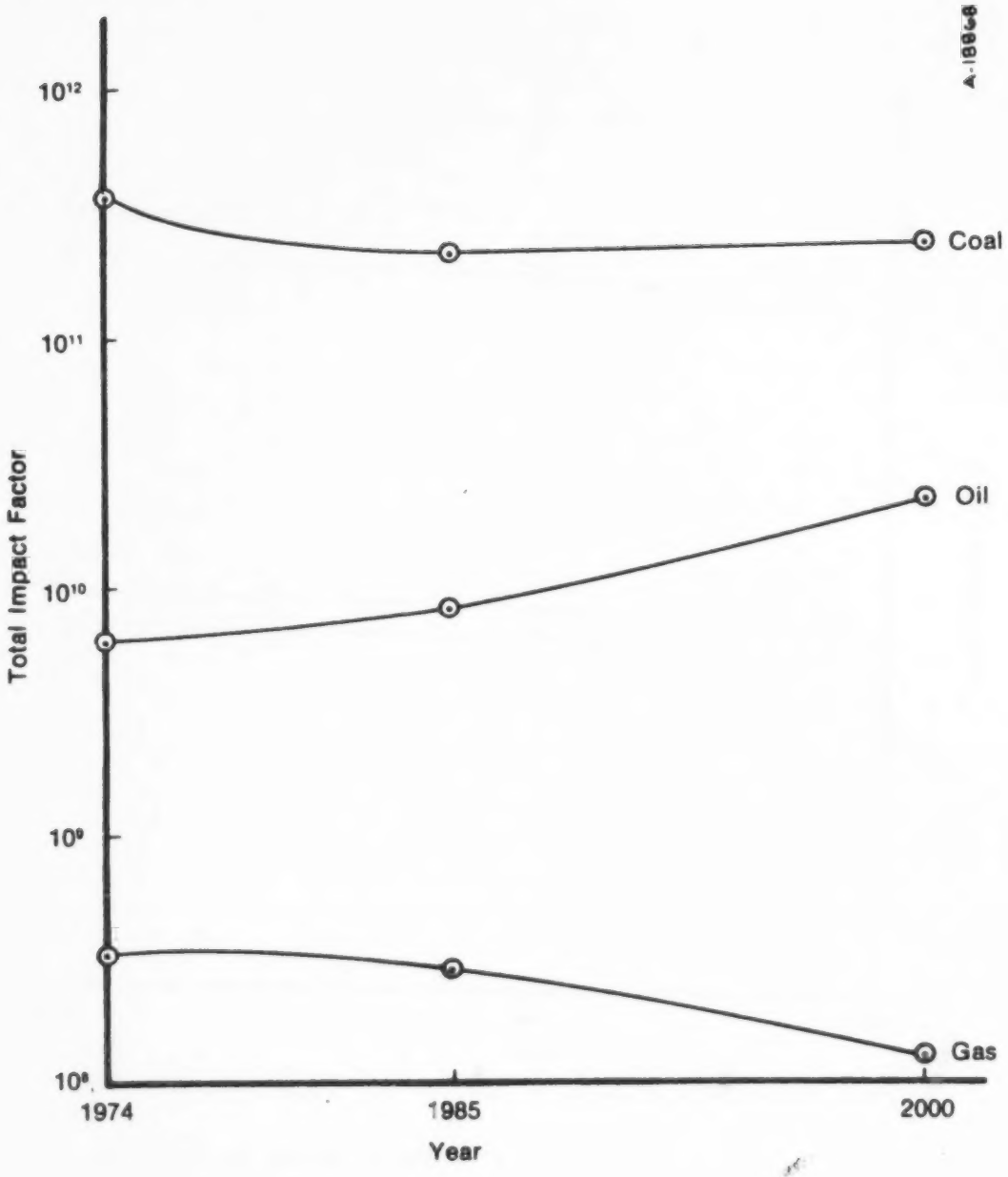


Figure H-21. Synthetics scenario trends in pollution potential for utility and large industrial boilers.

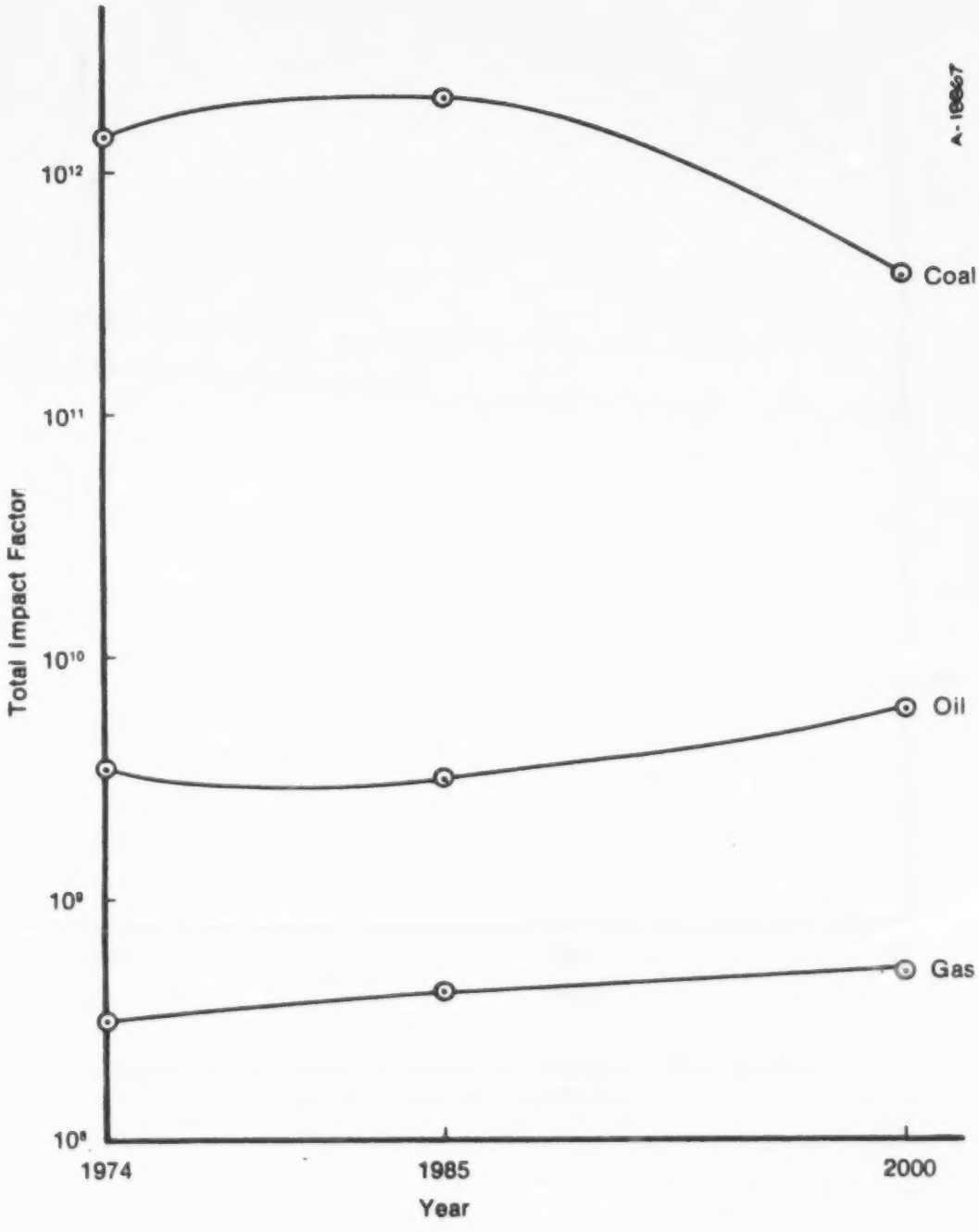


Figure H-22. Synthetics scenario trends in pollution potential for packaged boilers.

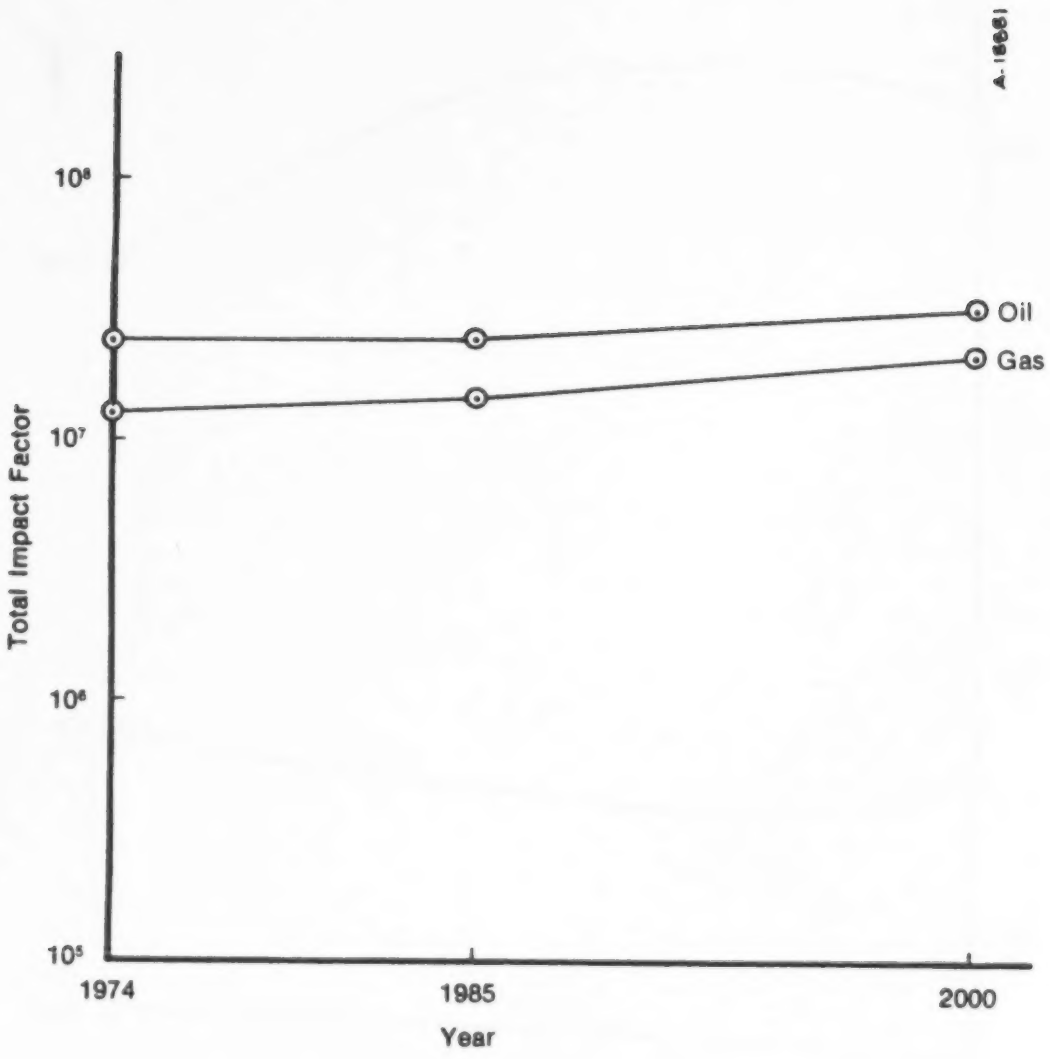


Figure H-23. Synthetics scenario trends in pollution potential for gas turbines.

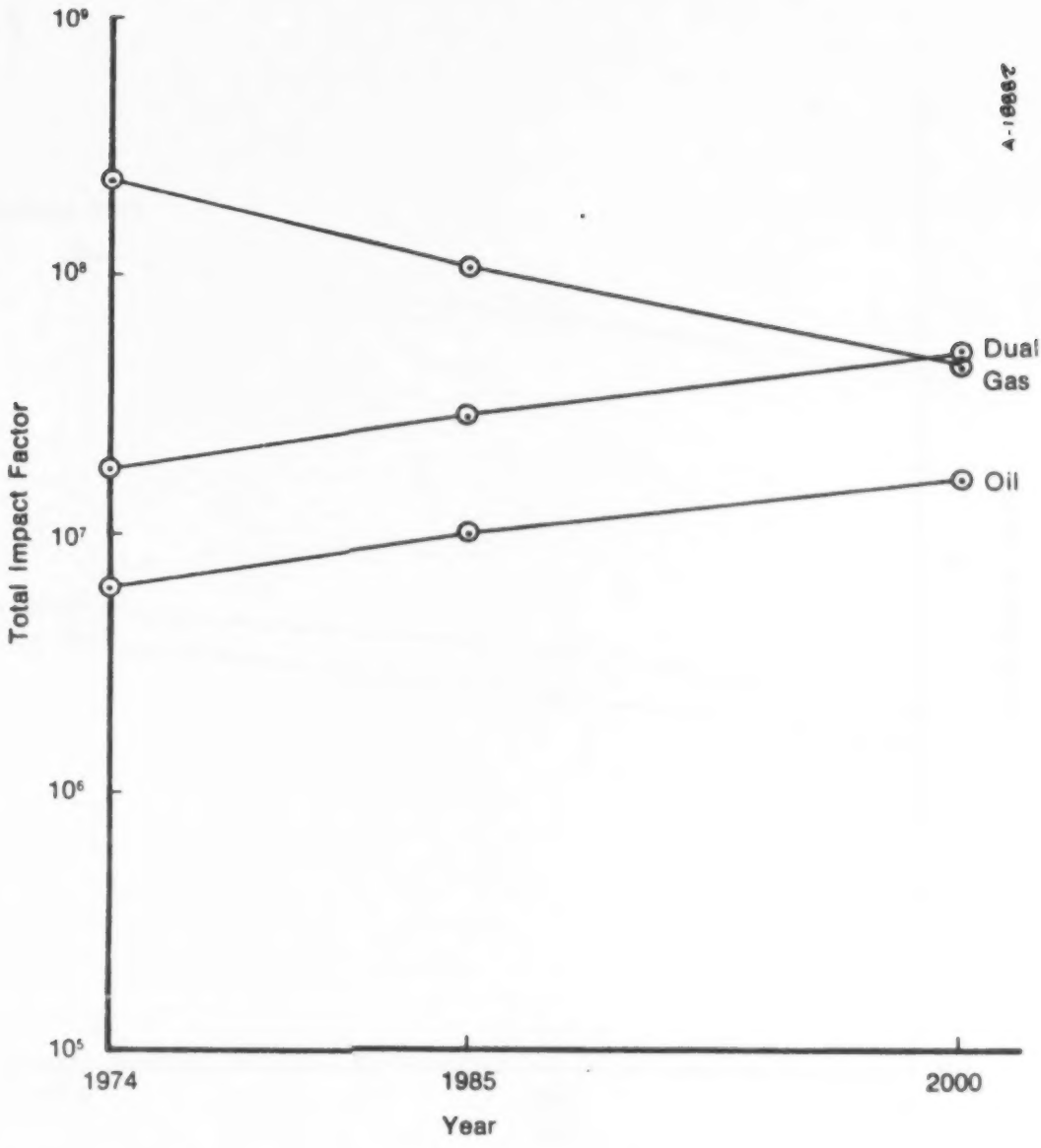
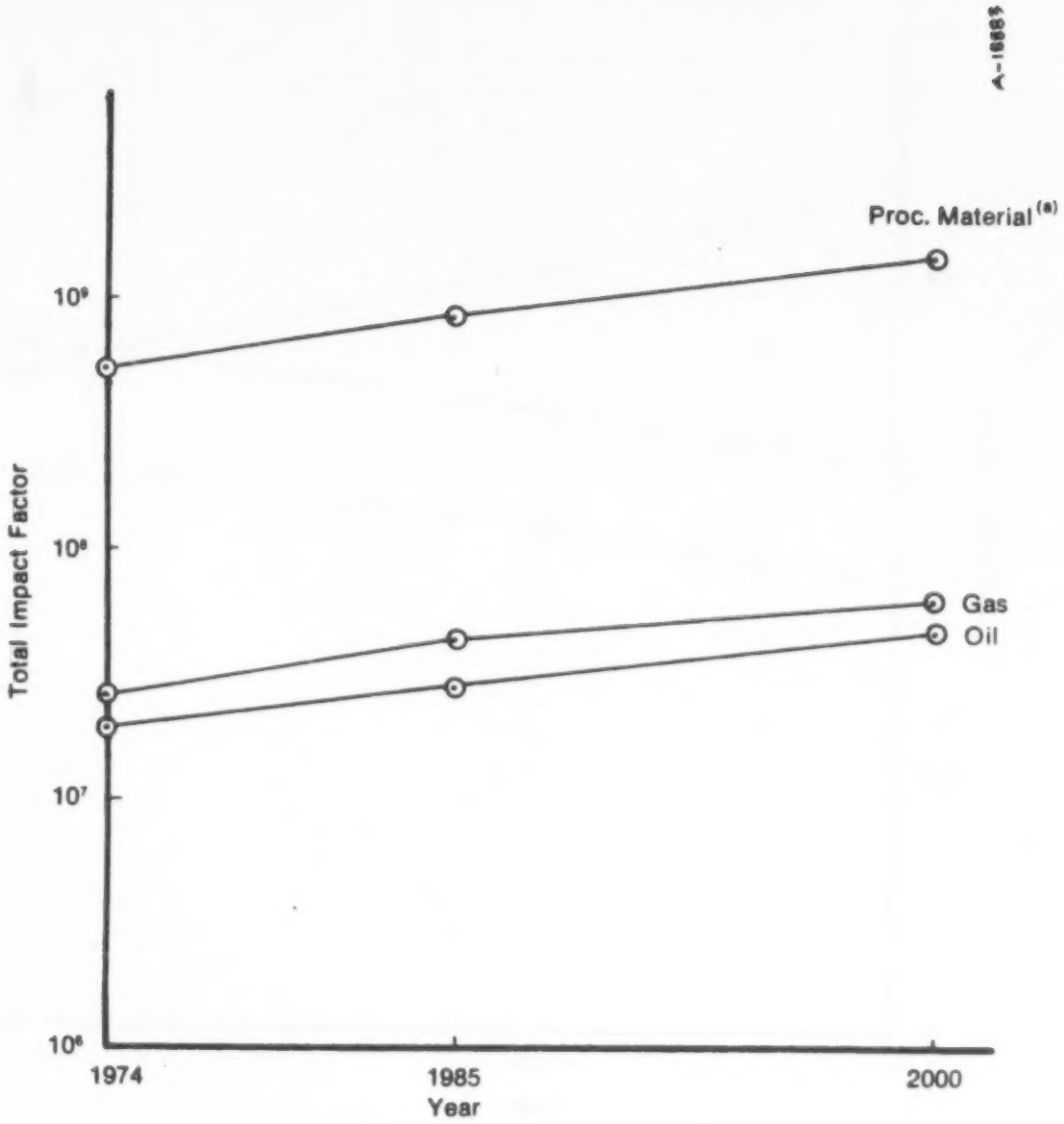


Figure H-24. Synthetics scenario trends in pollution potential for reciprocating IC engines.



(a) Emission factors given as a function of processed material

Figure H-25. Synthetics scenario trends in pollution potential for industrial process combustion.